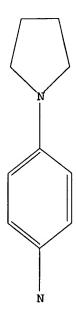
```
Chain nodes :
7 14
ring nodes :
1 2 3 4 5 6 9 10 11 12 13
```

```
7 14
ring nodes :
1 2 3 4 5 6 9 10 11 12 13
chain bonds :
1-7 4-9 12-14
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 9-10 9-13 10-11 11-12 12-13
exact/norm bonds :
1-7 4-9 9-10 9-13 12-14
exact bonds :
10-11 11-12 12-13
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 : 9 :
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 9:Atom 10:Atom 11:Atom
12:Atom 13:Atom 14:Atom
Generic attributes :
14:
Number of Carbon Atoms : less than 7
Number of Hetero Atoms : 2 or more
Element Count :
Node 14: Limited
   C,C3
   N,N2
   S,S0
```

L3 STRUCTURE UPLOADED

=> d
L3 HAS NO ANSWERS
L3 STR

0,00



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 12:55:21 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -85 TO ITERATE

0 ANSWERS 100.0% PROCESSED **85 ITERATIONS** 

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\* BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 1147 TO 2253

PROJECTED ANSWERS: 0 TO

L40 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 12:55:24 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED -1714 TO ITERATE

100.0% PROCESSED 1714 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L5 0 SEA SSS FUL L1

=> fil caplus

SINCE FILE COST IN U.S. DOLLARS TOTAL

SESSION ENTRY

FULL ESTIMATED COST 167.82 168.03

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FILE COVERS 1907 - 16 Feb 2006 VOL 144 ISS 8 FILE LAST UPDATED: 15 Feb 2006 (20060215/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> s us20040077852/pn L6 1 US20040077852/PN (US2004077852/PN)

=> d

```
L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:17396 CAPLUS
N 140:81854
TI Hair dyeing compositions containing pyrrolidinyl-p-phenylenediamine derivatives
IN Sabelle, Stephane; Ramos, Laure; Leduc, Madeleine
RA L'Oreal, Fr.
SO Eur. Pat. Appl., 21 pp.
CODEN: EFXXDW
DT PATENT
LA French
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE
PATENT NO. KIND DATE APPLICATION NO. DATE
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PP,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
FR 2841780 Al 20040109 FR 2002-8514 20020705
FR 2841780 BI 20040910
JP 2004035559 AZ 20040205 JP 2003-271500 20030707
US 2004077852 Al 20040422 US 2003-612986 20030707
C--
PRAI FR 2002-8514 A 20020705
US 2002-408900P P 20020909
OS MARRAT 140:81854
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
```

=> select 16 ENTER ANSWER NUMBER OR RANGE (1-):1 ENTER DISPLAY CODE (TI) OR ?:rn E1 THROUGH E48 ASSIGNED

=> fil reg COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 3.63 171.66

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 14 FEB 2006 HIGHEST RN 874270-88-9 DICTIONARY FILE UPDATES: 14 FEB 2006 HIGHEST RN 874270-88-9

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

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Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> s e1-e48

1 108-45-2/BI (108-45-2/RN) 1 123-30-8/BI (123-30-8/RN) 1 123-75-1/BI (123-75-1/RN) 1 16867-03-1/BI (16867-03-1/RN) 1 2380-86-1/BI (2380-86-1/RN) 1 2835-95-2/BI (2835-95-2/RN)

```
1 288-32-4/BI
    (288-32-4/RN)
1 30569-52-9/BI
    (30569-52-9/RN)
1 350-46-9/BI
    (350-46-9/RN)
1 361346-55-6/BI
    (361346-55-6/RN)
1 40499-83-0/BI
    (40499-83-0/RN)
1 5036-48-6/BI
    (5036-48-6/RN)
1 591-27-5/BI
    (591-27-5/RN)
1 607354-89-2/BI
    (607354-89-2/RN)
1 612-76-0/BI
    (612-76-0/RN)
1 640725-40-2/BI
    (640725-40-2/RN)
1 640725-42-4/BI
    (640725-42-4/RN)
1 640725-43-5/BI
    (640725-43-5/RN)
1 640725-44-6/BI
    (640725-44-6/RN)
1 640725-45-7/BI
    (640725-45-7/RN)
1 640725-46-8/BI
    (640725-46-8/RN)
1 640725-47-9/BI
    (640725-47-9/RN)
1 640725-48-0/BI
    (640725-48-0/RN)
1 640725-49-1/BI
    (640725-49-1/RN)
1 640725-50-4/BI
    (640725-50-4/RN)
1 640725-51-5/BI
    (640725-51-5/RN)
1 640725-52-6/BI
    (640725-52-6/RN)
1 640725-53-7/BI
    (640725-53-7/RN)
1 640725-54-8/BI
    (640725-54-8/RN)
1 640725-55-9/BI
    (640725-55-9/RN)
1 640725-56-0/BI
    (640725-56-0/RN)
1 640725-57-1/BI
    (640725-57-1/RN)
1 640725-58-2/BI
    (640725-58-2/RN)
1 640725-59-3/BI
    (640725-59-3/RN)
1 640725-60-6/BI
    (640725-60-6/RN)
1 640725-61-7/BI
```

(640725-61-7/RN)

1 640725-62-8/BI (640725-62-8/RN) 1 640725-63-9/BI (640725-63-9/RN) 1 640725-64-0/BI (640725-64-0/RN) 1 640725-65-1/BI (640725-65-1/RN) 1 640725-66-2/BI (640725-66-2/RN) 1 640725-67-3/BI (640725-67-3/RN) 1 640725-68-4/BI (640725-68-4/RN) 1 66422-95-5/BI (66422-95-5/RN) 1 7722-84-1/BI (7722-84-1/RN) 1 80419-48-3/BI (80419-48-3/RN) 1 9035-73-8/BI (9035-73-8/RN) 1 95-55-6/BI (95-55-6/RN)

48 (108-45-2/BI OR 123-30-8/BI OR 123-75-1/BI OR 16867-03-1/BI OR 2380-86-1/BI OR 2835-95-2/BI OR 288-32-4/BI OR 30569-52-9/BI OR 350-46-9/BI OR 361346-55-6/BI OR 40499-83-0/BI OR 5036-48-6/BI OR 591-27-5/BI OR 607354-89-2/BI OR 612-76-0/BI OR 640725-40-2/BI OR 640725-42-4/BI OR 640725-43-5/BI OR 640725-44-6/BI OR 640725-45-7/BI OR 640725-46-8/BI OR 640725-47-9/BI OR 640725-48-0/BI OR 640725-49-1/BI OR 640725-50-4/BI OR 640725-51-5/BI OR 640725-52-6/BI OR 640725-53-7/BI OR 640725-54-8/BI OR 640725-55-9/BI OR 640725-56-0/BI OR 640725-57-1/BI OR 640725-58-2/BI OR 640725-59-3/BI OR 640725-60-6/BI OR 640725-61-7/BI OR 640725-62-8/BI OR 640725-63-9/BI OR 640725-64-0/BI OR 640725-65-1/BI OR 640725-66-2/BI OR 640725-67-3/BI OR 640725-68-4/BI OR 66422-95-5/BI OR 7722-

84-1/BI OR 80419-48-3/BI OR 9035-73-8/BI OR 95-55-6/BI)

L7

```
L7 ANSWER 1 OF 48 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-68-4 REGISTRY
ED Entered STN: 23 Jan 2004
1H-Indiacole-1-propanamine, N-{1-(4-aminophenyl)-3-pyrrolidinyl}-,
monohydrochloride (9C1) (CA INDEX NAME)
RCA CA
LC STN Files: CA, CAPLUS, USPATFULL
CRN (640725-50-4)

HC1
NH
(CH2)3
```

=> fil reg
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 2.34 174.00

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Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> d his

(FILE 'HOME' ENTERED AT 12:54:24 ON 16 FEB 2006).

FILE 'REGISTRY' ENTERED AT 12:54:31 ON 16 FEB 2006
L1 STRUCTURE UPLOADED
L2 0 S L1
L3 STRUCTURE UPLOADED

L4 0 S L1 L5 0 S L1 FULL

FILE 'CAPLUS' ENTERED AT 12:56:22 ON 16 FEB 2006 L6 1 S US20040077852/PN SELECT L6 1 RN

FILE 'REGISTRY' ENTERED AT 12:56:50 ON 16 FEB 2006 L7 48 S E1-E48

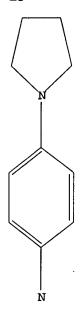
## FILE 'REGISTRY' ENTERED AT 12:57:35 ON 16 FEB 2006

=> d 13

L3 HAS NO ANSWERS

STR

L3



Structure attributes must be viewed using STN Express query preparation.

=> s 13

SAMPLE SEARCH INITIATED 12:57:56 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 2680 TO ITERATE

74.6% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS:

50495 TO 56705

PROJECTED ANSWERS:

7358 TO 9846

L8 50 SEA SSS SAM L3

=> s 13 full

FULL SEARCH INITIATED 12:58:08 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 55930 TO ITERATE

100.0% PROCESSED 55930 ITERATIONS

8658 ANSWERS

50 ANSWERS

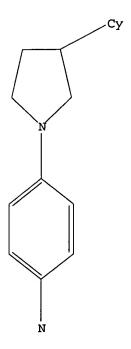
SEARCH TIME: 00.00.01

L9 8658 SEA SSS FUL L3

=>

Uploading C:\Program Files\Stnexp\Queries\QUERIES\10612986.str

S,S0 O,O0 L10 HAS NO ANSWERS L10 STR



Structure attributes must be viewed using STN Express query preparation.

## => d his

L1

(FILE 'HOME' ENTERED AT 12:54:24 ON 16 FEB 2006)

FILE 'REGISTRY' ENTERED AT 12:54:31 ON 16 FEB 2006

STRUCTURE UPLOADED

L2 0 S L1

L3 STRUCTURE UPLOADED

L4 0 S L1

L5 0 S L1 FULL

FILE 'CAPLUS' ENTERED AT 12:56:22 ON 16 FEB 2006

L6 1 S US20040077852/PN SELECT L6 1 RN

FILE 'REGISTRY' ENTERED AT 12:56:50 ON 16 FEB 2006

L7 48 S E1-E48

FILE 'REGISTRY' ENTERED AT 12:57:35 ON 16 FEB 2006

L8 50 S L3

L9 8658 S L3 FULL

L10 STRUCTURE UPLOADED

=> s l10 subset=19 full

FULL SUBSET SEARCH INITIATED 12:59:56 FILE 'REGISTRY'

FULL SUBSET SCREEN SEARCH COMPLETED - 8658 TO ITERATE

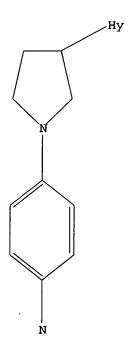
100.0% PROCESSED 8658 ITERATIONS

303 ANSWERS

```
SEARCH TIME: 00.00.01
           303 SEA SUB=L9 SSS FUL L10
L11
=> s l11 and caplus/lc
      49740058 CAPLUS/LC
          205 L11 AND CAPLUS/LC
L12
=>
Uploading C:\Program Files\Stnexp\Queries\QUERIES\10612986.str
                                       /11
                                            12
chain nodes :
7 14
ring nodes :
1 2 3 4 5 6 9 10 11 12 13
chain bonds :
1-7 4-9 12-14
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 9-10 9-13 10-11 11-12 12-13
exact/norm bonds :
1-7 4-9 9-10 9-13 12-14
exact bonds :
10-11 11-12 12-13
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 : 9 :
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 9:Atom 10:Atom 11:Atom
12:Atom 13:Atom 14:Atom
Generic attributes :
14:
Number of Carbon Atoms : less than 7
Number of Hetero Atoms : 2 or more
Element Count :
Node 14: Limited
   C,C3
   N,N2
   S,S0
   0,00
```

L13 STRUCTURE UPLOADED

=> d L13 HAS NO ANSWERS L13 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l13 subset=l11 full FULL SUBSET SEARCH INITIATED 13:00:33 FILE 'REGISTRY' FULL SUBSET SCREEN SEARCH COMPLETED - 303 TO ITERATE

100.0% PROCESSED 303 ITERATIONS 239 ANSWERS SEARCH TIME: 00.00.01

L14 239 SEA SUB=L11 SSS FUL L13

=> s l14 and caplusl/c
NUMERIC VALUE NOT VALID 'CAPLUSL'
0 CAPLUSL/C
L15 0 L14 AND CAPLUSL/C

=> s l14 and caplus/lc 49740058 CAPLUS/LC L16 149 L14 AND CAPLUS/LC

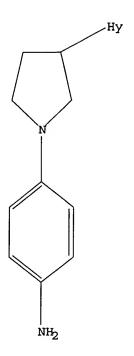
```
′Hy
chain nodes :
7 14
ring nodes :
1 2 3 4 5 6 9 10 11 12 13
chain bonds :
1-7 4-9 12-14
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 9-10 9-13 10-11 11-12 12-13
exact/norm bonds :
1-7 4-9 9-10 9-13 12-14
exact bonds :
10-11 11-12 12-13
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 : 9 :
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 9:Atom 10:Atom 11:Atom
12:Atom 13:Atom 14:Atom
Generic attributes :
14:
Number of Carbon Atoms : less than 7
Number of Hetero Atoms : 2 or more
Element Count :
Node 14: Limited
   C,C3
   N,N2
   S,SO
   0,00
```

Uploading C:\Program Files\Stnexp\Queries\QUERIES\10612986.str

## STRUCTURE UPLOADED

L17

L17 HAS NO ANSWERS L17 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l17 subset=l14 full FULL SUBSET SEARCH INITIATED 13:01:23 FILE 'REGISTRY' FULL SUBSET SCREEN SEARCH COMPLETED - 239 TO ITERATE

100.0% PROCESSED 239 ITERATIONS 67 ANSWERS SEARCH TIME: 00.00.01

L18 67 SEA SUB=L14 SSS FUL L17

=> s l18 and caplus/lc 49740058 CAPLUS/LC L19 47 L18 AND CAPLUS/LC

=> s l18 not l19 L20 20 L18 NOT L19

=> d 120 1-20

Absolute stereochemistry.

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L20 ANSWER 3 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 785775-69-1 REGISTRY
ED Entered STN: 22 Nov 2004
CN 1H-Imidazolium, 1,3-bis[1-(4-aminophenyl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)
MF C23 N29 N6
CC COM
SR CA

PAGE 1-A

PAGE 2-A

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L20 ANSWER 2 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 852803-64-6 REGISTRY
ED Entered STN: 23 Jun 2005
CN piperidinium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-1-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C16 H26 N3
C1 COM
SR CA

L20 ANSWER 4 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 781613-57-8 REGISTRY
ED Entered STN: 16 Nov 2004
CN 1H-Imidazolium, 1,1'-(1,3-propanediy1)bis[3-[1-(4-aminopheny1)-3-pyrolidiny1]- (9CI) (CA INDEX NAME)
MF C29 H38 N8
CC COM
SR CA

PAGE 2-A



PAGE 1-A

PAGE 2-A

ANSWER 7 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN 771473-53-1 REGISTRY Entered STN: 28 Oct 2004 
HH-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-(9CI) (CA INDEX NAME) 
C15 H21 N4 
COM CA L20 RN ED CN MF CI SR

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

ANSWER 6 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN 778573-39-0 REGISTRY
Entered STN: 11 Nov 2004
IH-Imidarolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl)-3-[3-(trimethylsilyl)propyl)- (9CI) (CA INDEX NAME)
C20 H33 N4 si
COM
CA L20 RN ED CN MF CI SR

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

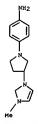
L20 ANSWER 9 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 76599-84-8 REGISTRY
ED Entered STN: 20 Oct 2004
Piperazinium, 1,4-bis[1-(4-aminophenyl)-3-pyrrolidinyl]-1,4-dimethyl(9CI) (CA INDEX NAME)
S 3D CONCORD
HF C26 H40 N6
CI COM
SR CA

L20 ANSWER 11 OF 20 REGISTRY COPYRIGHT 2006 ACS ON STN
RN 764662-22-8 REGISTRY
ED Entered STN: 18 Oct 2004
1.1-[midazolium.]
1-[(35,55)-1-(4-minophenyl)-5-[(3-methyl-lH-imidazolium-l-yl)methyl-3-pyrrolidinyl)-3-methyl- (9CI) (CA INDEX NAME)
FS STERGOSEARCH
MF C19 H26 N6
CC COM
SR CA

Absolute stereochemistry.

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L20 ANSWER 10 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 765897-50-5 REGISTRY
ED Entered STN: 20 Oct 2004
CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl- (9CI) (CA INDEX NAME)
S3 DCONCORD
MF C15 H24 N3
CC COM
SR CA



```
ANSWER 13 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN

753447-49-3 REGISTRY
DENTER OF STN: 29 Sep 2004
1,3'-Bipyrcrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl- (9CI) (CA INDEX NAMC)
3D CONCORD
1C (16 N26 N3
1C (CA)
REGISTRY
1.3'-Bipyrcrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl- (9CI) (CA)
1.5'-Bipyrcrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl- (9CI) (16 N26 N3)
1.5'-Bipyrcrolidinium, 1'-(4-amino-3-methylphenyl)-
```

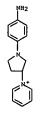
L20 ANSWER 15 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN R 749205-99-0 REGISTRY ED Entered STN: 22 Sep 2004 CN 1H-Imidazolium, l-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylailyl)propyl]- (SCI) (CA INDEX NAME) H5 C19 H31 N4 Si CA CA

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

PAGE 1-A

PAGE 2-A

```
L20 ANSMER 17 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 740082-89-7 REGISTRY
ED Entered STN: 06 Sep 2004
CN IH-Imidacolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3-
pyrrolidinyl]-3-methyl- (9CI) (CA INDEX NAME)
MF C24 H43 N4 Si2
CM CA
SR CA
```



```
=> d his
     (FILE 'HOME' ENTERED AT 12:54:24 ON 16 FEB 2006)
     FILE 'REGISTRY' ENTERED AT 12:54:31 ON 16 FEB 2006
L1
                STRUCTURE UPLOADED
L2
              0 S L1
L3
                STRUCTURE UPLOADED
              0 S L1
L4
L5
              0 S L1 FULL
     FILE 'CAPLUS' ENTERED AT 12:56:22 ON 16 FEB 2006
              1 S US20040077852/PN
L6
                SELECT L6 1 RN
     FILE 'REGISTRY' ENTERED AT 12:56:50 ON 16 FEB 2006
L7
             48 S E1-E48
     FILE 'REGISTRY' ENTERED AT 12:57:35 ON 16 FEB 2006
L8
             50 S L3
           8658 S L3 FULL
L9
                STRUCTURE UPLOADED
L10
L11
            303 S L10 FULL SUB=L9
            205 S L11 AND CAPLUS/LC
L12
L13
                STRUCTURE UPLOADED
L14
            239 S L13 FULL SUB=L11
             0 S L14 AND CAPLUSL/C
L15
            149 S L14 AND CAPLUS/LC
L16
               STRUCTURE UPLOADED
L17
             67 S L17 FULL SUB=L14
L18
T.19
             47 S 1:18 AND CAPLUS/IC
```

http://www.cas.org/infopolicy.html

=> fil reg
COST IN U.S. DOLLARS

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
0.46 520.60

FILE 'REGISTRY' ENTERED AT 13:03:41 ON 16 FEB 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 14 FEB 2006 HIGHEST RN 874270-88-9 DICTIONARY FILE UPDATES: 14 FEB 2006 HIGHEST RN 874270-88-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

\*\*\*\*\*\*\*\*\*\*

\* The CA roles and document type information have been removed from \*

\* the IDE default display format and the ED field has been added, \*

\* effective March 20, 2005. A new display format, IDERL, is now \*

\* available and contains the CA role and document type information. \*

```
L19 ANSWER 1 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 852619-37-5 REGISTRY
ED Entered STN: 21 Jun 2005
CHI-Imidazolium, 1-[(35)-1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-,
chloride, monohydrochloride (9CI) (CA INDEX NAME)
FS STREDSEARCH
MF C14 H19 N4 . C1 H . C1
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
CRN (852803-70-4)
```

Absolute stereochemistry.

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

## => d his

	(FILE 'HOME' ENTERED AT 12:54:24 ON 16 FEB 2006)
L1 L2 L3 L4 L5	FILE 'REGISTRY' ENTERED AT 12:54:31 ON 16 FEB 2006 STRUCTURE UPLOADED  0 S L1 STRUCTURE UPLOADED  0 S L1 0 S L1 FULL
L6	FILE 'CAPLUS' ENTERED AT 12:56:22 ON 16 FEB 2006 1 S US20040077852/PN SELECT L6 1 RN
L7	FILE 'REGISTRY' ENTERED AT 12:56:50 ON 16 FEB 2006 48 S E1-E48
	FILE 'REGISTRY' ENTERED AT 12:57:35 ON 16 FEB 2006
L8	50 S L3
L9	8658 S L3 FULL
L10	STRUCTURE UPLOADED
L11	STRUCTURE UPLOADED 303 S L10 FULL SUB=L9
L12	205 S L11 AND CAPLUS/LC STRUCTURE UPLOADED
L13	STRUCTURE UPLOADED 239 S L13 FULL SUB=L11
L14	239 S L13 FULL SUB=L11
L15	0 S L14 AND CAPLUSL/C 149 S L14 AND CAPLUS/LC STRUCTURE UPLOADED 67 S L17 FULL SUB=L14
L16	149 S L14 AND CAPLUS/LC
L17	STRUCTURE UPLOADED
L18	67 S L17 FULL SUB=L14
	47 S L18 AND CAPLUS/LC 20 S L18 NOT L19
L20	TO 2 PIR MOL PIA

FILE 'CAPLUS' ENTERED AT 13:03:35 ON 16 FEB 2006

FILE 'REGISTRY' ENTERED AT 13:03:41 ON 16 FEB 2006

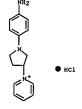
=> d l19 1-47

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L19 ANSWER 1 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 852619-37-5 REGISTRY
ED Entered STN: 21 Jun 2005
1 H-Imidazolium, 1-{(35)-1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-,
chloride, monohydrochloride (9CI) (CA INDEX NAME)
FS STERZOSEARCH
FC C14 H19 N4 . C1 H . C1
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
CRN (852803-70-4)
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Absolute stereochemistry.

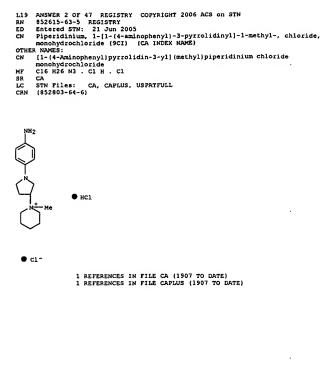
● c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE 1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPULES (1907 TO DATE)



● c1-

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)



L19 ANSWER 4 of 47 REGISTRY COPYRIGHT 2006 ACS on STN RN 842125-88-6 REGISTRY ED Entered STN: 04 Mar 2005 CN Cyclobuta[1,2-c:3,4-c']difurantetrone, tetrahydro-, polymer with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3a,4,5,9b-tetrahydro-1H-benz[e]isoindole-1,3(2H)-dione (9CI) (CA INDEX NAME)
MF (C28 H24 N4 O4 . C8 H4 O6)x PMS
POlyamic acid, Polyamic acid formed, Polyimide, Polyimide formed
CA
STN Files: CA, CAPLUS CM 1 CRN 842125-84-2 CMF C28 H24 N4 O4

CM 2

L19 ANSWER 5 OF 47 REGISTRY COPYRIGHT 2006 ACS ON STN
RN 842125-84-2 REGISTRY
ED Entered STN: 04 Mar 2005

1H-Benz[e]isoindole-1,3(2H)-dione,
2-(4-aminophenyl)-3-(1-(4-aminophenyl)2,5-dioxoo-3-pyreolidinyl]-3a,4,5,9b-tetrahydro- (9CI) (CA INDEX NAME)
FS 3D CONCORD
FC C28 H24 M4 04
CI COM
SR CA
LC STN Files: CA, CAPLUS

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 7 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 748183-31-5 REGISTRY
ED Entered STN: 20 Sep 2004
[1,3"-Bipyrrolidin]-2-one, 1'-{4-aminopheny1}-, (3'R)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C14 H19 N3 O
SC CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 6 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 764662-23-9 REGISTRY COPYRIGHT 2006 ACS on STN
RN 764662-23-9 REGISTRY
Enter of the control of the CA STN Files: CA, CAPLUS, USPATFULL CM 1 CRN 764662-22-8 CMF C19 H26 N6

Absolute stereochemistry.

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 16053-58-0 CMF C H3 O3 S

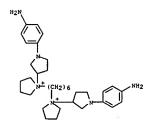
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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

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L19 ANSWER 9 OF 47 REGISTRY COPYRIGHT 2006 ACS ON STN
RN 701975-31-7 REGISTRY
ED Entered STN: 01 Jul 2004
CN 1H-Imidezolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3-
pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)
MF C24 H43 N4 Si2 . C1
SC CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
CRN [740082-89-7]
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$$\begin{array}{c} \text{NH2} \\ \text{CH}_2\text{-}\text{CH}_2\text{-}\text{CH}_2\text{-}\text{CH}_2\text{-}\text{SiNe}_3 \\ \\ \text{N} \\ \\ \text{N} \\ \\ \text{Me} \end{array}$$

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
14 REFERENCES IN FILE CA (1907 TO DATE)
14 REFERENCES IN FILE CAPLUS (1907 TO DATE)



●2 C1~

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

**●** C1 \*

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
14 REFERENCES IN FILE CA (1907 TO DATE)
14 REFERENCES IN FILE CAPLUS (1907 TO DATE)

NH2
NH2
N
(H2) 3

PAGE 1-A

PAGE 2-A

●2 Cl-

PAGE 1-A

PAGE 2-A

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 14 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 667914-97-8 REGISTRY
ED Entered STN: 26 Mar 2004
Piperazinium, 1,4-bis[1-(4-aminophenyl)-3-pyrrolidinyl]-1,4-dimethyl-,
dichloride (9CI) (CA INDEX NAME)
CN 1,4-Bis[1-(4-aminophenyl)pyrrolidin-3-yl]-1,4-dimethylpiperazinediium
dichloride
MF C26 H40 N6 . 2 Cl
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
CRN (765898-84-8)

●2 C1-

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 15 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 667914-96-7 REGISTRY
ED Entered STN: 26 Mar 2004
CN 1H-Imidazolium, 1,3-bis[1-(4-aminophenyl)-3-pyrrolidinyl]-, chloride
(9C1) (9CI)
(CA INDEX NAME)
OTHER NAMES:
(CN 1,3-Bis[1-(4-aminophenyl)pyrrolidin-3-yl]-1H-imidazol-3-ium chloride
MF C23 H29 N6 . Cl
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
CRN (785775-69-1)

PAGE 1-A

PAGE 2-A

$$\Diamond$$

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE 1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPULES (1907 TO DATE)

L19 ANSMER 16 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 667914-95-6 REGISTRY
ED Entered STN: 26 Mar 2004
1H-Imidazolium, 1,1'-(1,6-hexanediyl)bis[3-[1-(4-aminophenyl)-3-pyrrolidinyl]-, dichloride (9CI) (CA INDEX NAME)
RC 32 H44 N8 . 2 C1
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
CRN (748768-65-2)

PAGE 1-A

PAGE 2-A

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L19 ANSWER 16 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN 1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

(Continued)

L19 ANSWER 17 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 667914-90-1 REGISTRY
ED Entered STN: 26 Mar 2004
H-Imidazolium, 1,1'-(1,3-propanediyl)bis[3-[1-(4-aminophenyl)-3-pyrrolidinyl]-, dibromide, dihydrobromide (9CI) (CA INDEX NAME)
MF C29 H38 N8 . 2 Br H . 2 Br
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
CRN (781613-57-8)

PAGE 1-A

L19 ANSWER 17 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN (Continued)

PAGE 2-A

●2 Br

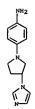
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ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE 1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPUNS (1907 TO DATE) L19 ANSWER 18 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-66-2 REGISTRY
ED Entered STN: 23 Jan 2004
CN Benrenamine, 4-[1,3'-bipyrrolidin]-1'-yl-, monohydrochloride (9CI) (CA INDEX NAME)
HF CA CA CAPLUS, USPATFULL
CRN (640725-43-5)

HC1

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

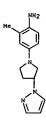
L19 ANSWER 19 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-65-1 REGISTRY
ED Entered STN: 23 Jan 2004
Benzenamine, 4-[3-(1+-imidazol-1-yl)-1-pyrrolidinyl]-, monohydrochloride
(9CI) (CA INDEX NAME)
FC 13 H16 N4 . C1 H
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
CRN (640725-40-2)



• HC1

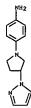
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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 20 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-60-6 REGISTRY
ED Entered STN: 23 Jan 2004
Benzenamine, 2-methyl-4-[3-(1H-pyrazol-1-yl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H18 N4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

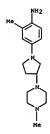
L19 ANSWER 21 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-59-3 REGISTRY
ED Entered STN: 23 Jan 2004
Benzenamine, 4-[3-(1H-pyrazol-1-yl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)
S 3D CONCORD
MF C13 H16 N4
SC CA
LC STN Files: CA, CAPLUS, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT \*\*

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

Li9 ANSWER 23 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-55-9 REGISTRY
ED Entered STN: 23 Jan 2004
CN Benzenamine, 2-methyl-4-[3-(4-methyl-1-piperazinyl)-1-pyrrolidinyl](9CI) (9CI)
(CA INDEX NAME)
FS 3D CONCORD
MF C16 H26 N4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

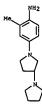
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L19 ANSMER 22 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-56-0 REGISTRY
ED Entered STN: 23 Jan 2004
Benzenamine, 4-[3-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-1pyzrolidinyl|-2-methyl- (9CI) (CA INDEX NAME)
3D CONCORD
MF C17 H28 N4
CC STN Files: CA, CAPLUS, USPATFULL

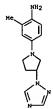
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1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 24 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-54-8 REGISTRY
ED Entered STN: 23 Jan 2004
CN Benzenamine, 4-[1,3'-bipyrrolidin]-1'-yl-2-methyl- {9CI} (CA INDEX NAME)
FS 3D CONCORD
MF C15 H23 N3
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*



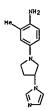
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

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L19 ANSMER 27 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-45-7 REGISTRY
ED Entered STN: 23 Jan 2004
Benzenamine, 4-[3-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-1pyrrolidinyll- (9CI) (CA INDEX NAME)
F3 3D CONCORD
MF C16 H26 N4
SC CA
LC STN Files: CA, CAPLUS, USPATFULL

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 28 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-44-6 REGISTRY
ED Entered STN: 23 Jan 2004
Benzenamine, 6-[3-(4-methyl-1-piperazinyl)-1-pyrrolidinyl]- (9CI) (CA
INDEX NAME)
FS 3D CONCORD
MF C15 H24 N4
SC CA
LC STN Files: CA, CAPLUS, USPATFULL



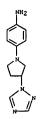
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT \*\*

ANSWER 29 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN 640725-43-5 REGISTRY

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

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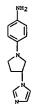
L19 ANSWER 30 OF 47 REGISTRY COPYRIGHT 2006 ACS ON STN
RN 640725-42-4 REGISTRY
ED Entered STN: 23 Jan 2004
Bencenamine, 4-[3-[1H-1,2,4-triazol-1-yl]-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)
F3 D CONCORD
MF C12 H15 N5
SC CA CA STN Files: CA, CAPLUS, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

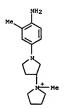
L19 ANSWER 31 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-40-2 REGISTRY
ED Entered STN: 23 Jan 2004
CN Benzenamine, 4-[3-(1H-imidazol-1-y1)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
HF C13 H16 N4
CI COM
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 32 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607355-21-5 REGISTRY
DE Entered STN: 21 Oct 2003
CN 1,3'-Bipyrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride
(9C1) (CA INDEX NAME)
MF C16 H26 N3 . C1
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
CRN (753447-49-3)



• c1

L19 ANSWER 33 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607355-20-4 REGISTRY
ED Entered STN: 21 Oct 2003
CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)
MF C15 H24 N3 . C1
SR CA

MF SR LC CRN CA STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL (765897-50-5)

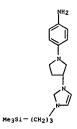
15 REFERENCES IN FILE CA (1907 TO DATE) 15 REFERENCES IN FILE CAPLUS (1907 TO DATE)

ANSWER 34 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN 607355-19-1 REGISTRY Entered STN: 21 Oct 2003 IH-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME) C20 H33 M4 Si · Cl CA STN Files: CA, CAPLUS, TOXCENTER, USPATZ, USPATFULL (778573-39-0)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE 14 REFERENCES IN FILE CA (1907 TO DATE) 14 REFERENCES IN FILE CAPULES (1907 TO DATE)

ANSWER 35 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN 607355-18-0 REGISTRY Entered STN: 21 Oct 2003 IH-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME) C19 H31 N4 Si . C1 CA STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL (749205-99-0) L19 RN ED CN

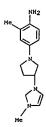


• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE 15 REFERENCES IN FILE CA (1907 TO DATE) 15 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSMER 36 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607355-16-8 REGISTRY
ED Entered STN: 21 Oct 2003

1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-,
chloride (9CI) (CA INDEX NAME)
FC 15 N21 N4 . C1
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATE, USPATFULL
CRN (771473-53-1)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
15 REFERENCES IN FILE CA (1907 TO DATE)
15 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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LI9 ANSWER 37 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607355-12-4 REGISTRY
ED Entered STN: 21 Oct 2003

1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride
(9CI) (CA INDEX NAME)
F C14 H19 N4 . C1
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
CRN (760171-36-6)

NH2
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• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
15 REFERENCES IN FILE CA (1907 TO DATE)
15 REFERENCES IN FILE CAPLUS (1907 TO DATE)

•

L19 ANSWER 39 OF 47 REGISTRY COPYRIGHT 2006 ACS ON STN
RN 607353-05-5 REGISTRY
ED Entered STN: 21 Oct 2003
CN Pyridinium, 1-{1-(4-aminophenyl)-3-pyrrolidinyl}-, acetate (9CI) (CA
INDEX NAME)
MF C15 H18 N3 . C2 H3 O2
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
CM 1

CRN 607355-04-4 CMF C15 H18 N3

CM 2 CRN 71-50-1 CMF C2 H3 O2

о || -о-с-снз

> 1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 38 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607355-09-9 REGISTRY
ED Entered STN: 21 Oct 2003

(4-A2a-1-azoniabicyclo[2.2.2]octane,
1-[1-(4-aminophenyl)-3-pyrcolidinyl)-,
metheneaulfonate, monohydrochloride (9CI) (CA INDEX NAME)

MF C16 M25 N4 . C H3 O3 S . C1 H

CRN 607355-08-8
CH 1

CRN 607355-08-8
CHF C16 H25 N4

CM 2

CRN 16053-58-0
CHF C H3 O3 S

-о-s-сн<sub>3</sub>

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 40 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN

RN 607355-02-2 REGISTRY
ED Entered STN: 21 Oct 2003
CN Thiazolium, 3-[1-(4-aminophenyl)-3-pyrrolidinyl)-, acetate (9CI) (CA
INDEX NAME)

MF C13 H16 N3 S. C2 H3 O2
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

CM 1

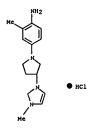
NH2

CM 2 CRN 71-50-1 CMF C2 H3 O

CRN 607355-01-1 CMF C13 H16 N3 S

-о-с-сн<sub>3</sub>

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L19 ANSWER 41 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607334-98-3 REGISTRY
ED Entered STN: 21 Oct 2003
CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-,
chloride, monohydrochloride (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-3-methyl-1H-imidazol-3-ium
chloride monohydrochloride
MF C15 H21 N4 . Cl H . Cl
STN Files: CA, CAPLUS, USPAT2, USPATFULL
CRN (771473-53-1)
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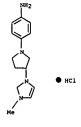
● c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
Lip ANSWER 43 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607354-86-9 REGISTRY
ED Entered STN: 21 Oct 2003
ClH-Inidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride, monohydrochloride (9CI) (CA INDEX NAME)
CTHER NAMES:
CN 3-[1-(4-aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride hydrochloride
FC 14 H19 N4 . Cl H . Cl
CC STN Files: CA, CAPLUS, USPAT2, USPATFULL
CRN (760171-36-6)
```



• c1

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE 2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE) ANSWER 42 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607354-93-8 REGISTRY
ED Entered STN: 21 Oct 2003

1,3'-8ipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride, monohydrochloride (9CI)
RC C15 H24 N3 . C1 H . C1
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
CRN (765897-50-5)

NH2

NH2

NH2

C1-

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
L19 ANSWER 44 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 194216-46-1 REGISTRY
ED Entered STN: 19 Sep 1997
CN Cholestane-3, 6-diol, bis(4-aminobenzoate), (38,50)-, polymer
with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl)-
3a, 4,5,9b-tetrahydro-8-methyl-1H-benz[e]isoindole-1,3(2H)-dione,
4,4'-methylenebis(benzenamine] and
tetrahydro-3a,6a-dimethylcyclobute[1,2-
c:3,4-c']difurantetrone (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H-Benz[e]isoindole-1,3(2H)-dione,
2,5-dioxo-3-pyrrolidinyl)-3a,4,5,9b-tetrahydro-8-methyl-, polymer with
(3B,5a)-cholestane-3,6-diyl bis(4-aminobenzoate),
4,4'-methylenebis(benzenamine) and
tetrahydro-3a,6a-dimethylcyclobute[1,2-
c:3,4-c']difurantetrone (9CI)
CN Benzenamine, 4,4'-methylenebis-, polymer with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl)-3a,4,5,9b-tetrahydro-8-methyl-1H-
benz[e]isoindole-1,3(2H)-dione, (3B,5a)-cholestane-3,6-diyl)
bis(4-aminobenzoate) and tetrahydro-3a,6a-dimethylcyclobute[1,2-c:3,4-c']difurantetrone (9CI)
CN Cyclobute[1,2-c:3,4-c']difurantetrone, tetrahydro-3a,6a-dimethyl-,
polymer
with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl)-
3a,4,5,9b-tetrahydro-8-methyl-1H-benz[e]isoindole-1,3(2H)-dione,
(3B,5a)-cholestane-3,6-diyl bis(4-aminobenzoate) and
4,4'-methylenebis[benzenamine] (9CI)
SS STEREOSEARCH
MF (CAI H38 N2 O4 . C29 H26 N4 O4 . C13 H14 N2 . C10 H8 O6)x
CI PMS
CM 1
CRN 194216-36-9
CMF C41 H36 N2 O4
```

Absolute stereochemistry.

L19 ANSWER 44 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN (Continued)

CM 2

CRN 194216-35-8 CMF C29 H26 N4 O4

CRN 137820-87-2 CMF C10 H8 O6

L19 ANSWER 45 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN (Continued)

CM 2

CRN 194216-35-8 CMF C29 H26 N4 O4

CM 3

CRN 13080-86-9 CMF C27 H26 N2 O2

CM

CRN 89-32-7 CMF C10 H2 O6

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

NAME)
OTHER CA INDEX NAMES:
CN 1H. 3H-Report 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 

mer with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3a, 4,5,9b-tetrahydro-8-methyl-1H-benz(e]iaoindole-1,3(2H)-dione, 1H,3H-benzo[1,2-c:4,5-c')difuran-1,3,5,7-tetrone and (3β,5α)-cholestane-3,6-diyl bis(4-aminobenzoate) (9CI)

(C41 H58 N2 O4 . C29 H26 N4 O4 . C27 H26 N2 O2 . C10 H2 O6)x

PMS Polyamic acid, Polyamic acid formed, Polyester, Polyether, Polyimide, Polyimide formed

CA STN Files: CA, CAPLUS

CM 1

CRN 194216-36-9 CMF C41 H58 N2 O4

Absolute stereochemistry.

L19 ANSWER 46 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 194216-37-0 REGISTRY
ED Entered STN: 19 Sep 1997
CN Cholestane-3,6-diol, bis(4-aminobenzoate), (38,5\alpha)-, polymer
with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl)3a,4,5,9b-tetrahydro-8-mechyl-1H-benz[e]isoindole-1,3[2H)-dione,
4,4'-methylenebis[benzenamine] and 3a,4,5,9b-tetrahydro-5-methyl-5(tetrahydro-2,5-dioxo-3-furanyl)naphtho[1,2-c]furan-1,3-dione (9CI) (CA
INDEX NAME)

COTHER CR INDEX NAMES:
CN 1H-Benz[e]isoindole-1,3[2H)-dione,
2-(4-aminophenyl)-5-[1-(4-aminophenyl)2,5-dioxo-3-pyrrolidinyl)-3a,4,5,9b-tetrahydro-8-methyl-, polymer with
(3B,5\alpha)-cholestane-3,6-diyl bis(4-aminobenzoate),
4,4'-methylenebis[benzenamine] and 3a,4,5,9b-tetrahydro-5-methyl-5(tetrahydro-2,5-dioxo-3-pyrrolidinyl)-3a,4,5,9b-tetrahydro-5-methyl-5(tetrahydro-2,5-dioxo-3-pyrrolidinyl)-3a,4,5,9b-tetrahydro-5-methyl-1bbenz[e]isoindole-1,3[2H)-dione, (3B,5\alpha)-cholestane-3,6-diyl
bis(4-aminobenzoate) and 3a,4,5,9b-tetrahydro-5-methyl-5(doxo-3-furanyl)naphtho[1,2-c]furan-1,3-dione (9CI)

Naphtho[1,2-c]furan-1,3-dione,
3a,4,5,9b-tetrahydro-5-methyl-5-(tetrahydro-2,5dioxo-3-furanyl)-polymer with
2-(4-aminophenyl)-5-[1-(4-aminophenyl)2,5-dioxo-3-pyrrolidinyl)-3a,4,5,9b-tetrahydro-8-methyl-1Hbenz[e]isoindole-1,3(2H)-dione, (3B,5\alpha)-cholestane-3,6-diyl
bis(4-aminobenzoate) and 4,4'-methylenebis(benzenamine) (9CI)

FS STEMEROSCARCH
MF [C41 HS8 N2 O4 C29 H26 N4 O4 C17 H14 O6 C13 H14 N2)x

(C41 H58 N2 O4 . C29 H26 N4 O4 . C17 H14 O6 . C13 H14 N2)x

Polyamic acid, Polyamic acid formed, Polyester, Polyimide, Polyimide formed

CA STN Files: CA, CAPLUS

CH 1

CRN 194216-36-9 CMF C41 H58 N2 O4

Absolute stereochemistry.

L19 ANSWER 46 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN (Continued)

CM 2

CRN 194216-35-8 CMF C29 H26 N4 O4

CM 3

CRN 67879-21-4 CMF C17 H14 O6

CM 4

CRN 101-77-9 CMF C13 H14 N2

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE) L19 ANSWER 47 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 194216-35-8 REGISTRY
ED Entered STN: 19 Sep 1997
N 1H-Benz[e]isoIndole-1,3(2H)-dione,
2-(4-aminophenyl)-5-[1-(4-aminophenyl)2,5-dioxo-3-pyrrolidinyl)-3a,4,5,9b-tetrahydro-8-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C29 H26 N4 O4
CI COM
SR CA
LC STN Files: CA, CAPLUS

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE) => fil caplus
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=> s l19

L21 23 L19

=> d ibib abs hitstr 1-23

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

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Structure search iteration limits have been increased. See HELP SLIMITS for details.

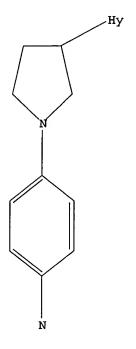
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

Uploading C:\Program Files\Stnexp\Queries\QUERIES\10612986.str

L22

N,N2 S,S0 O,O0 L22 HAS NO ANSWERS L22 STR



Structure attributes must be viewed using STN Express guery preparation.

=> s l1

SAMPLE SEARCH INITIATED 13:14:31 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 85 TO ITERATE

100.0% PROCESSED 85 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 1147 TO 2253

PROJECTED ANSWERS: 0 TO 0

L23 0 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 13:14:36 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1714 TO ITERATE

100.0% PROCESSED 1714 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L24 0 SEA SSS FUL L1

=> s 122

SAMPLE SEARCH INITIATED 13:15:05 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 2680 TO ITERATE

74.6% PROCESSED 2000 ITERATIONS 1 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

46 ANSWERS

PROJECTED ITERATIONS: 50495 TO 56705 PROJECTED ANSWERS: 1 TO 95

L25 1 SEA SSS SAM L22

=> s 122 full

FULL SEARCH INITIATED 13:15:07 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 55930 TO ITERATE

100.0% PROCESSED 55930 ITERATIONS

SEARCH TIME: 00.00.01

L26 46 SEA SSS FUL L22

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49740058 CAPLUS/LC

L27 29 L26 AND CAPLUS/LC

=> s 126 not 127

L28 17 L26 NOT L27

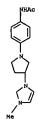
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L28 ANSWER 1 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 852803-70-4 REGISTRY
ED Entered STN: 23 Jun 2005
CN 1H-Imidazolium, 1-[(3S)-1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl- (9CI)
(CA INDEX NAME)
FS STEREOSEARCH
HF C14 H19 N4
C1 C0M
SR CA

Absolute stereochemistry.

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L28 ANSWER 3 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 852615-58-8 REGISTRY
ED Entered STN: 21 Jun 2005
CN 1H-Imidazolium, 1-[1-[4-(acetylamino)phenyl]-3-pyrrolidinyl]-3-methyl(9CI) (CA INDEX NAME)
RF C16 H21 N4 O
CC COM
SR CA



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

Absolute stereochemistry.

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

PAGE 2-A

L28 ANSWER 5 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 781613-57-8 REGISTRY
ED Entered STN: 16 Nov 2004
CN 1H-Imidazolium, 1,1'-(1,3-propanediyl)bis[3-[1-(4-aminophenyl)-3pyrrolidinyl)- (9CI) (CA INDEX NAME)
MF C29 H38 N8
CCI COM
SR CA

PAGE 1-A

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L28 RN ED CN

ANSWER 7 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN 773847-98-6 REGISTRY Entered STN: 02 Nov 2004 1H-Imidazolium, 1,1'-(1,3-propanediyl)bis[3-[1-(4-nitrophenyl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME) C29 H34 N8 O4 CCM CA

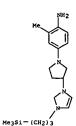
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PAGE 2-A

PAGE 2-A

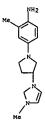
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ANSWER 6 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN 778573-39-0 REGISTRY Entered STN: 11 Nov 2004 HI-Inidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]- (9CI) (CA INDEX NAME) C20 H33 N4 Si COM CA L28 RN ED CN



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L28 ANSWER 8 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 771473-53-1 REGISTRY COPYRIGHT 2006 ACS on STN
DE Entered STN: 28 Oct 2004
CN 1H-Imidazolium, 1-{1-(4-amino-3-methylphenyl)-3-pyrrolidinyl}-3-methyl(9C1) (CA INDEX NAME)
MF C15 H21 N4
CC CM
SR CA



L28 ANSWER 9 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 769921-12-2 REGISTRY
ED Entered STN: 27 Oct 2004
CN 1H-Imidazolium, 1-[1-[4-amino-3-[2-(trimethylsilyl)ethyl]phenyl]-3pyrrolidinyl]-3-methyl- (9CI) (CA INDEX NAME)
MF C19 H31 N4 Si
CI COM
SR CA

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L28 ANSWER 11 OF 17 REGISTRY COPYRIGHT 2006 ACS ON STN
RN 764662-22-8 REGISTRY
ED Entered STN: 18 Oct 2004
1 H-Imidazolium,
1-[(35,55)-1-(4-aminophenyl)-5-[(3-methyl-1H-imidazolium-1-yl)methyl]-3-pyrrolidinyl)-3-methyl- (9CI) (CA INDEX NAME)
FS STEREOSFARCH
MF C19 H26 N6
CC COM
SR CA

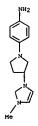
Absolute stereochemistry.

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L28 ANSWER 10 OF 17 REGISTRY COPYRIGHT 2006 ACS ON STN
RN 764662-26-2 REGISTRY
ED Entered STN: 18 Oct 2004
1H-Imidazolium, 1-[(35,55)-5-[(3-methyl-1H-imidazolium-1-yl)methyl]-1-(4-nitrophenyl)-3-pyrrolidinyl]-3-methyl- (9CI) (CA INDEX NAME)
STRENOSEARCH
HF C19 H24 N6 O2
CC COM
SR CA

Absolute stereochemistry.

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE



L28 ANSWER 13 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 749205-99-0 REGISTRY
ED Entered STN: 22 Sep 2004
CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl)- (9CI) (CA INDEX NAME)
MF C19 H31 N4 Si
CCI COM
SR CA

Measi - (CH2) 3

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 740082-89-7 REGISTRY COPYRIGHT 2006 ACS on STN
RN 740082-89-7 REGISTRY
ED Entered STN: 06 Sep 2004
CN 1H-Inidacolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3pycrolidinyl]-3-methyl- (9CI) (CA INDEX NAME)

MF C24 H43 N4 Si2
C1 C0M
SR CA

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L28 ANSWER 14 OF 17 REGISTRY COPYRIGHT 2006 ACS ON STN
RN 748768-65-2 REGISTRY
ED Entered STN: 21 Sep 2004
CN 1H-Imidazolium, 1,1'-{1,6-hexanediy1}bis[3-{1-(4-aminopheny1)-3pyr.olidiny1]- (9CI) (CA INDEX NAME)
MF C32 H44 N8
CI COM
SR CA

PAGE 1-A

NH2

NH2

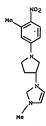
N

(CH2) 6

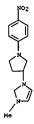
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ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L28 ANSWER 16 OF 17 REGISTRY COPYRIGHT 2006 ACS ON STN
RN 607354-95-0 REGISTRY
ED Entered STN: 21 Oct 2003
CN 1H-Imidazolium, 1-methyl-3-[1-{3-methyl-4-nitrophenyl})-3-pyrrolidinyl}(9C1) (CA INDEX NAME)
MF C15 H19 N4 O2
CC CCM
SR CA



```
L28 ANSWER 17 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607354-83-6 REGISTRY
ED Entered STN: 21 Oct 2003
CN 1H-Imidazolium, 1-methyl-3-[1-(4-nitrophenyl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)
MF C14 H17 N4 O2
CI COM
SR CA
```



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FILE 'REGISTRY' ENTERED AT 12:54:31 ON 16 FEB 2006 STRUCTURE UPLOADED

L1 STRUC L2 0 S L1

L3 STRUCTURE UPLOADED

L4 0 S L1

L5 0 S L1 FULL

FILE 'CAPLUS' ENTERED AT 12:56:22 ON 16 FEB 2006 L6 1 S US20040077852/PN SELECT L6 1 RN

FILE 'REGISTRY' ENTERED AT 12:56:50 ON 16 FEB 2006 L7 48 S E1-E48

FILE 'REGISTRY' ENTERED AT 12:57:35 ON 16 FEB 2006

L8 50 S L3 L9 8658 S L3 FULL

L10 STRUCTURE UPLOADED

L11 303 S L10 FULL SUB=L9

L12 205 S L11 AND CAPLUS/LC

L13 STRUCTURE UPLOADED

L14 239 S L13 FULL SUB=L11

L15 0 S L14 AND CAPLUSL/C

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149 S L14 AND CAPLUS/LC
L16
               STRUCTURE UPLOADED
L17
            67 S L17 FULL SUB=L14
L18
            47 S L18 AND CAPLUS/LC
L19
            20 S L18 NOT L19
L20
    FILE 'CAPLUS' ENTERED AT 13:03:35 ON 16 FEB 2006
    FILE 'REGISTRY' ENTERED AT 13:03:41 ON 16 FEB 2006
    FILE 'CAPLUS' ENTERED AT 13:05:13 ON 16 FEB 2006
            23 S L19
L21
    FILE 'REGISTRY' ENTERED AT 13:13:23 ON 16 FEB 2006
L22
               STRUCTURE UPLOADED
L23
             0 S L1
             0 S L1 FULL
L24
L25
             1 S L22
             46 S L22 FULL
L26
L27
            29 S L26 AND CAPLUS/LC
            17 S L26 NOT L27
L28
    FILE 'CAPLUS' ENTERED AT 13:15:28 ON 16 FEB 2006
=> s 127
L29
           21 L27
=> s 127 not 121
           21 L27
            1 L27 NOT L21
L30
=> s 129 not 121
            1 L29 NOT L21
=> s 130 not 131
L32
            0 L30 NOT L31
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=> d ibib abs hitstr 131

L31 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1974:477923 CAPLUS
DOCUMENT NUMBER: 81:77923 Imidazole derivatives
INVENTOR(S): Image Gen: Kotani, Akeshi
PATENT ASSIGNEE(S): Yoshitomi Pharmaceutical Industries, Ltd.
Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: PAULIX ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 49049959	A2	19740515	JP 1972-93335	19720916
JP 55038949	B4	19801007		
PRIORITY APPLN. INFO.:			JP 1972-93335 A	19720916

GI For diagram(s), see printed CA Issue.

AB Imidazole derivs. [I; R = H, lower alkyl, cycloalkyl, aryl with or without substituents, aralkyl (substituents may be selected from halo, lower alkyl, lower alkoxy, lower alkoxycarbonyl, lower alkylthio, polyhalo lower

alkyl, lower alkoxy, lower alkoxycarDonyl, lower alkyllino, prejection alkyl, No2); X = H, lower alkyl, aryll were prepared by reacting II with cis-HO2CCH:CHCONHR. I had anti-tremor, anti-convulsant, and fighting inhibitory actions. E.g., a mixture of 3.4 g imidazole and 5.8 g maleamidic acid in DMF was refluxed 20 hr, 40 ml Ac20 and 4 g AcONa were added, and the whole was refluxed 2 hr to give 2.1 g l-imidazolylsuccinimide. Among 16 more I similarly prepared, were the following (R and X given): Bu, H; Ph,

IT

H; cyclododecyl, 2-Me; p-EtOC6H4, 4-Ph.
53616-14-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
53616-14-1 CAPLUS
2,5-Pyrcolidinedione, 3-(1H-imidazol-1-yl)-1-(4-nitrophenyl)- (9CI) (CA
INDEX NAME)

=> log y
COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

CA SUBSCRIBER PRICE

SINCE FILE TOTAL
ENTRY SESSION
-0.75 -18.00

STN INTERNATIONAL LOGOFF AT 13:18:03 ON 16 FEB 2006

L21 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2006 ACS ON STN
ACCESSION NUMBER: 2005:673828 CAPLUS
DOCUMENT NUMBER: 143:179089
TITLE: Hair dye composition contained. Hair dye composition containing an alcohol oxidase

a cationic oxidation base for dyelng keratin fibers Plos, Gregory L'Oreal, Fr. Fr. Demande, 48 pp. CODEN: FRXXBL INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: PE LANGUAGE: FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: Patent French

P.	PATENT NO.					KIND DATE			AP	PLI	D	DATE						
-							-											
F	R 2	865	388			A1		2005	0729	FR	20	04-	775			2	0040	128
EP 1559412						A1		2005	0803	EP	20	20050120						
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, G	R,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY, A	L, '	TR,	BG,	CZ,	EE,	ΗU,	PL,	SK,
			BA,	HR,	IS,	YU												
U	S 2	005	2573	29		A1		2005	1124	US	20	05-4	4408	0		2	0050	128
PRIORI	ΤY	APP	LN.	INFO	.:					FR	20	04-	775			A 2	0040	128
													5443				0040	

OTHER SOURCE(S):

R SOURCE(S): MARPAT 143:179089
A composition for the dyeing of keratinous fibers, in particular of human keratinous fibers such as the hair, contains at least an alc. oxidase enzyme, a substrate for this enzyme, and at least a cationic oxidation

base.
 A hair dye contained
{1-{4-minophenyl}-pyrrolidin-3-yl}-trimethylammonium
 chloride 3x10-3 mole, ethanel 25 g, meta-aminophenel 3x10-3 mole, alc.
 oxidase 20000 units, 2-amino-2-methyl-1-propanol q.s. pH = 7, and water
 q.s. 100 g.

1T 607355-12-4 607355-16-8 607355-18-0
 607355-20-4 607355-21-5 701975-28-2
 701975-31-7

/UIY/5-31-7
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hair dye composition containing alc. oxidase and cationic oxidation base for

e for dyeing keratin fibers)
607355-12-4 CAPLUS
1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl)-3-methyl-, chloride
(9CI) (CA INDEX NAME)

L21 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-20-4 CAPLUS
CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

607355-21-5 CAPLUS 1,3'-8ipytrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9C1) (CA INDEX NAME)

L21 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-16-8 CAPLUS
CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methylchloride (9C1) (CA INDEX NAME)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-18-0 CAPLUS

ON 1H-Inidazolium, l-[1-(4-aminophenyl)-3-pyrrolidinyl)-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

701975-28-2 CAPLUS
1H-Imidazolium, 1-[1-[4-amino-3-[2-(trimethylsilyl)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 701975-31-7 CAPLUS
CN lH-Imidazolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

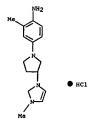
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L21 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
p-substituted anilines with 1,4-dihalo-2-butanols)
RN 607354-86-9 CAPLUS
CN 1H-Inidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride, monohydrochloride (9CI) (CA INDEX NAME)

● c1 =

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607354-98-3 CAPIUS
CN 1H-Inidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-,
chloride, monohydrochloride (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 852615-62-4 CAPLUS

L21 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:467804 CAPLUS
DOCUMENT NUMBER: 143:7491
TITLE: Process for the preparation of p-phenylenediamines
comprising pyrrolidines substituted by nitrogen
radicals and their intermediates via

cyclocondensation

of p-substituted anilines with 1,4-dihalo-2-butanols Bordier, Thierry; Xu, Jinzhu L'oreal, Fr. Eur. Pat. Appl., 41 pp. CODEN: EPXXDW

INVENTOR(S): PATENT ASSIGNEE(S):

SOURCE: Patent

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: French

> PATENT NO. APPLICATION NO. DATE KIND DATE 20050601

FR 2003-50939 US 2004-995558 FR 2003-50939 FR 2862969 US 2005209466 PRIORITY APPLN. INFO.: 20050603 20031128 20050922 20041124 A 20031128

OTHER SOURCE(S): MARPAT 143:7491

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

The invention is related to the preparation of p-phenylenediamines I via cyclocondensation of p-substituted anilines II with 1,4-disubstituted-2-butanols of formula Y-(CH2)2-CH(OH)-CH2-Y [the carbon connecting R2 to pyrrolidine ring is a/chiral; n = 0-4; when n ≥2, R1 = identical or different; R1 = halo, linear or branched aliphatic hydrocarbyl, aryl,

Rl cannot be a peroxide bond, N3+, NO2, or NO; R2 = (non)cationic N radical). The advantages include elimination of 3-pyrrolidinol as starting material, use of cheap materials, and a viable industrial scale-up. Thus, cyclocondensation of 4-aminoacetanilide with 1,4-dibromo-2-butanol gave pyrrolidinol III in 72.7% yield. Activation

of

III with MesO2Cl, substitution with TMA in EtOH, and HCl-catalyzed deacetylation gave IVecl-=MCl.

IT 607354-86-89, 3-[1-(4-Rminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium Chloride Hydrochloride 607354-98-39, 1-[1-(4-Rmino-3-methyl)phenyl)pyrrolidin-3-yl]-3-methyl-1H-imidazol-3-ium chloride monohydrochloride 852615-62-49, [1-(4-Aminophenyl)pyrrolidin-3-yl]pyrdinium chloride monohydrochloride 852615-63-59. [1-(4-Aminophenyl)pyrrolidin-3-yl] [methyl)piperidinium chloride monohydrochloride RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation) of p-phenylenediamines comprising pyrrolidines substituted by nitrogen radicals and their intermediates via cyclocondensation of

ANSWER 2 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Conti Pyridinium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl)-, chloride, monohydrochloride (9CI) (CA INDEX NAME) (Continued)

• c1-

852615-63-5 CAPLUS

Piperidinium, 1-[1-(4-aminopheny1)-3-pyrrolidiny1]-1-methy1-, chloride, monohydrochloride (9CI) (CA INDEX NAME)

● c1-

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L21 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2006 ACS ON STN ACCESSION NUMBER: 2005:467803 CAPLUS DOCUMENT NUMBER: 143:7490 TITLE: Process for the company of the com 143:7490
Process for the preparation of optically active
1-(4-nitrophenyl)-3-pyrrolidinol derivatives without
isolating (R)-3-pyrrolidinols intermediates, and
para-phenylenediamines comprising chiral pyrrolidinyl
groups for use in dyeing compositions for keratinous
fibers
Bogdier, Thiarmout

fibers
Bordier, Thierry; Xu, Jinzhu
L'oreal, Fr.
Eur. Pat. Appl., 35 pp.
CODEN: EPXXDW INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

APPLICATION NO. PATENT NO. DATE KIND DATE A2 A3 20050601 20050713 EP 2004-106111 20041126 EP 1535904 EP 1535904 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, 1E, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR, IS, YU

FR 2003-50940 US 2004-995559 FR 2003-50940 FR 2862970 US 2005209464 PRIORITY APPLN. INFO.: 20050603 20050922 20041124 A 20031128 P 20031224 US 2003-531966P

MARPAT 143:7490

OTHER SOURCE(S):

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

The invention is related to the preparation of optically active 1-(4-nitrophenyl)-3-pyrrolidinol deriva. (I) without isolating (R)-3-pyrrolidinols intermediates by decarboxylation of trans-4-hydroxy-L-proline (II), amination of 4-halonitrobenzene III with II, followed by optionally inversion of configuration [n = 0-4; when n ≥2, R1 = identical or different; r1 = H, linear or branched aliphatic hydrocarbyl, aryl, etc.; R2 = (non)cationic nitrogen radical). The invention is also related to the preparation of chiral amines IV and ruse

use use as oxidation bases in dyeing compns. for keratinous fibers and dyeing kit containing said compns. (no data). The advantages include reduced

er of steps, high global yield, and simple process. For example, decarboxylation of II in NMP at 155 for 3 h and amination of 4-fluoronitrobenzene with (R)-3-pyrrolidinol generated in-situ gave I (R1 = H). VeCl-=HGl was prepared in 3 steps by activation of I (R1 = H) with MeSO2Cl, substitution with N-methylimidazole, and hydrogenation over Paddo

852619-37-5P

RI: COS (Cosmetic use); IMF (Industrial manufacture); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of optically active 1-(4-nitrophenyl)-3-pyrrolidinols without

L21 ANSWER 4 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:118441 CAPLUS
DOCUMENT NUMBER: 142:229090
Liquid crystal orientation agent, liquid crystal orientation film, and liquid crystal display element

NUMENTOR(S): MUST ASSIGNEE(S): JSR Ltd., Japan
SOURCE: JSR Ltd., Japan
DOCUMENT TYPE: CODEN: JKCKAF
DOCUMENT TYPE: Patent
LANGUAGE: JAPANESE
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: 1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE JP 2005037920 PRIORITY APPLN. INFO.: 20050210

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Disclosed is the liquid crystal orientation agent containing  $\geq 1$  polymer selected from I-IV (Q, R = tetravalent organic group; and X, Y = divalent

organic group). 842125-84-2

842123-89-6F
R1: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP
(Preparation); USES (Uses)
 (liquid crystal orientation agent and film therefrom for LCD element)
842125-88-6 CAPLUS
Cyclobuta[1,2-c:3,4-c']difurantetrone, tetrahydro-, polymer with

2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3a,4,5,9b-tetrahydro-1H-benz[e]isoindole-1,3(2H)-dione (9CI) (CA INDEX NAME)

CM 1

CRN 842125-84-2

L21 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
isolating (R)-3-pyrrolidinols intermediates, and
para-phenylenediamines
comprising chiral pyrrolidinyl groups for use in dyeing compns. for
keratinous fibers)
R8 552619-37-5 CAPLUS
CN 1H-Imidazolium, 1-[(3S)-1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-,
chloride, monohydrochloride (9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L21 ANSWER 4 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN CMF C28 H24 N4 O4 (Continued)

L21 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2004:796305 CAPLUS DOCUMENT NUMBER: 141:295851

141:295851
Preparation of p-phenylenediamines with a disubstituted pyrrolidine group, bearing a cationic radical and their use for dyeing keratinic fibers Ramos, Laure; Sabelle, Stephane L'oreal, Fr.
Eur. Pat. Appl., 32 pp.
CODEN: EPXXDW TITLE:

INVENTOR (5):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Patent

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE A1 20040929 EP 2004-290635 20040309 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, EP 2004-290635 20040309 EP 1462453 FR 2852953 FR 2003-3873 20030328 20041001 JP 2004300155 US 2004248961 20041028 JP 2004-93404 US 2004-810814 20040326 20041209 20040329 PRIORITY APPLN. INFO.: FR 2003-3873 A 20030328

US 2003-469013P

P 20030509

OTHER SOURCE(S): MARPAT 141:295851

AB Title compds. I [wherein n = 0-4; when n ≥ 2, Rl can be identical or different; Rl = halo, Z, (un)saturated (un)subsittuted aliphatic or alicyclic hydrocarbyl, optionally containing one or more O, Si, S, or SO2; Rl is

-O-O-, diazo, nitro or nitroso; R2 = Z, CO2H and derivs., NH2 and monoalkyl/dialkyl/carbamoyl, etc.; R3 = Z, H, OH and derivs., NH2 and derivs., SH, CO2H and derivs., monoalkyl/dialkylcarbamoyl, elkylsulfonyl, alkyl, etc.; provided that at least one of R2 and R3 is an onium radical; Z = onium radical selected from trialkylammonium, pyridinium, H-imidazol-3-ium; 3H-imidazol-1-ium, etc.; and their addition salts]

prepared as oxidation bases for dyeing keratinous fibers, in particular

L21 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2004:696342 CAPLUS DOCUMENT NUMBER: 141:225302 TITLE: Preparation

Preparation of N-arylheterocycles as melanin

Preparation or N-aryIneterocycles as melanin concentrating hormone (MCH) antagonists. Schwink, Lothar: Stengelin, Siegfried: Gossel, Matthias: Boehme, Thomas: Hessler, Gerhard: Stahl, Petra; Gretzke, Dirk Aventis Pharma Deutschland GmbH, Germany PCT Int. Appl., 390 pp.
CODEN: PIXXD2 INVENTOR (S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

Patent

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PRI

PA						KIND DATE					ICAT		DATE				
	WO 2004072025 WO 2004072025					A2 20040826							20040213				
	W:										BG,						
		GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP, MK,	KE,	KG,	KP,	KR,	KZ,	LC,
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	5D,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,
											FR, BJ,						
DE	1030							TD, 0909		DE 2	003-	1030	6250		2	0030	214
CA	2516	118			AA		2004	0826		CA 2	004-	2516	118		2	0040	213
		AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
	2004	2201	91		A1		2004	1104		US 2	TR,	7798	53		2	0040	217
	2005 APP										005-						
									,	us 2	003-	4885	45D	-		0030	718
													101				

WO 2004-EP1342

W 20040213

MARPAT 141:225302 OTHER SOURCE(S):

Title compds. [I: R1, R2 = H, alkyl, alkoxyalkyl, aryloxyalkyl, alkylcarbonyl, alkenylcarbonyl, etc.; R1R2N = atoms to form a 4-10 membered mono-, bi-, or spirocyclic (substituted) ring: R3 = H, alkyl;

R5 = H, alkyl, OH, alkoxy, alkylcarbonyloxy, alkylthio; R6-R9 = H, alkyl; R6R7, R8R9 = O; A, B, D, G = N, CR42; AB, DG = CR42; R42 = H, F, Cl, Br,

L21 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) hair fibers. For example, II=C1-=HC1 was prepd., in 3 steps, via substitution of 2-chloromethyl-1-(4-nitrophenyl)pyrrolidine (prepn.

))
in N-methylimidazole in toluene at reflux for 9 h, and hydrogenation of the nitro deriv. over Pd/C. Formulations of II+Cl-+HCl in acidic medium gave blue-violet and gray shades.
764652-23-39

IT 764652-23-99
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (oxidation base in dyeing; preparation of p-phenylenediamines with a disubstituted pyrrolidine group, bearing a cationic radical and their use for dyeing keratinic fibers)
RN 764662-23-9 CAPLUS
CN 1H-Imidazolium;
1-(133,55)-1-(4-aminophenyl)-5-[(3-methyl-1H-imidazolium-1-yl)methyl]-3-pyrrolidinyl]-3-methyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 764662-22-8 CMF C19 H26 N6

Absolute stereochemistry.

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 16053-58-0 CMF C H3 O3 S

L21 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) iodo, CF3, NO2, cyano, OCF3, alkoxy, alkylthio, alkenyl, cycloalk, cycloalkenyl, cycloalkenyl, alkynyl, CO2H, etc.; R10 = H, alkyl, alkenyl, alkynyl; x = NR52, O, bond, C:C, C:tplbond.C, etc.; R52 = H, alkyl; E = (substituted) C3-14 carbocyclyl, heterocyclyl; K = bond, O, CH2O, S, SO, CO, C:C, C:tplbond.C, etc.; R11 = H, alkyl, alkoxyalkyl, alkenyl, alkynyl.

CO, C:C, C.tplbond.C, etc.; R11 = H, alkyl, alkoxyalkyl, alkenyl, alkynyl,
alkynyl,
alkynyl,
(unsatch.) tricyclic ring; m, n = 0-2], were prepd. Thus,
N-[1-(4-aminophenyl)pyrrolidin-3-yl]piperidine was treated with
carbonyldimidazole and then with 4-(4-chlorophenyl)piperidine to give
4-(4-chlorophenyl)piperidine-1-carboxylic acid [4-[3(acetylmethylamino)pyrrolidin-1-yl]phenyl]amide. The latter at 30 mg/kg
orally in female NNRI mice reduced milk consumption by 64%.

IT 748183-30-49 748183-31-59
BL BCT (Beactrant): SDN (Symthetic preparation); BBCE (Preparation); BBCT

748183-30-4P 748183-31-5P
RL: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(Preparation of N-arylheterocycles as MCH antagonists)
748183-30-4 CAPLUS
BenZenamine, 4-{3-(7-azabicyclo[2.2.1]hept-7-yl)-1-pyrrolidinyl]- (9CI)
(CA INDEX NAME)

748183-31-5 CAPLUS
[1,3'-Bipyrrolidin]-2-one, 1'-(4-aminophenyl)-, (3'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L21 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
DOCUMENT NUMBER:
11TLE:
111LE:
11LE:
11LE

DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

EP 1426517 A1 20040616 EP 2003-293142 20031212

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
FR 2848431 A1 20040618 FR 2002-15764 20021213
US 20042055904 A1 20041021 US 2003-735291 20031212
RITY APPLN. INFO: FR 2002-15764 A 20021213 PRIORITY APPLN. INFO .: US 2003-444634P

OTHER SOURCE(S): MARPAT 141:42544

AB Hair dyeing compns. comprise a tertiary p-phenylenediamine with a pyrrolidine ring and a vitamin derivative Thus, a composition contained oleyl alc.

6, oleic acid 3, diglyceryl oleyl ether 6, hexaglyceryl oleyl ether 6, diethylaminopropyl laurylaminosuccinamate sodium salt 3, ethoxyleted oleylamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20, propylene glycol 20, dilinoleic acid 1.5, reducing agents 0.915, sequestrants 1, resorcinol 0.085, [1-(4-aminophenyl)pyrrolidin-3-ylltrimethylammonium chloride 1.0, 2-methyl-5-aminophenol 0.5, niacinamide

0.2, perfume qs, ammonia 10.2, and water qs to 100 g. The above composition

Josition
was mixed with 6% H202 and applied onto hair.
607355-12-4 607355-16-8 607355-18-0
607355-19-1 607355-20-4 607355-21-5
701975-28-2 701975-31-7
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hair dyeing compns, comprising phenylenediamine with pyrrolidine ring and vitamin derivative)
607355-12-4 CAPLUS
HEINIGERO IN LAIR (Generic populary) - Repursolidiny) - Separative Colorida

60/355-12-4 CAPLUS 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

● c1 =

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-19-1 CAPLUS CN 1H-Imidazolium, 1-{1-(4-amino-3-methylphenyl)-3-pyrrolidinyl)-3-[3-(trimethylsilyl)propyl)-, chloride (9CI) (CA INDEX NAME)

● c1-

Ma3Si - (CH2)3

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-20-4 CAPLUS
CN 1,3'-Bipyrrolidinium, 1'-{4-aminophenyl}-1-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

● c1~

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-16-8 CAPLUS CN H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl)-3-methyl-, chloride (9CI) (CA INDEX NAME)

● c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-18-0 CAPLUS
CN 1H-Inidazolium, 1-{1-{4-aminopheny1}-3-pyrrolidiny1}-3-[3-{trimethylsily1}propy1}-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

€ c1 =

607355-21-5 CAPLUS 1,3'-Bipyrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● c1 -

701975-28-2 CAPLUS
1H-Imidazolium, 1-[1-[4-amino-3-[2-(trimethylsilyl)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

● c1 =

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 701975-31-7 CAPLUS
CN 1H-Imidazolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsily1)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● c1 =

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L21 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN  $\,$  607355-16-8 CAPLUS

OF 355-168 CAPLUS (4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9C1) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-18-0 CAPLUS

CN 1H-Imidazolium, l-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 8 OF 23
ACCESSION NUMBER:
DOCUMENT NUMBER:
111:42343
Hair dyeing compositions comprising a tertiary
p-phenylenediamine with a pyrrolidine ring and a
polyol ester
Cotteret, Jean; Lagrange, Alain
L'oreal, Fr.
SOURCE:
CODENT TYPE:
DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PAYENT INFORMATION:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PRIORITY APPLN. INFO.:

APPLICATION NO. DATE DATE PATENT NO. KIND PATENT NO. XINU DAIL AFFELDATION OF CONTROL OF CONTROL

US 2003-444625P

OTHER SOURCE(S): MARPAT 141:42543

AB Hair dyeing compns. comprising a tertiary p-phenylenediamine with a pyrrolidine ring and a polyol ester. Thus, a composition contained oleyl alc.

pyrrolidine ring and a polyol ester. Thus, a composition contained l alc.

4, oleic acid 5, diglyceryl oleyl ether 4, tetraglyceryl oleyl ether 3.6, ethoxylated amino acid 8, ethoxylated oleylamine 4, ethoxylated decyl ether 2.7, PEG oleate 2.5, adipic acid 1.3, reducing agents 0.63, sequestrants 1, resorcinol 0.085, [1-(4-mainophenyl)pyrrolidin-3-ylltrimethylammonium chloride 0.8, 5-N(B-hydroxyethyllamino-2-methylphenol 0.4, perfume qs, ammonia 10, and water qs to 100 g. The above composition was mixed with 60 H202 and applied onto hair. 607355-12-4 607355-16-6 607355-18-0 607355-19-0 607355-19-1 607355-20-4 607355-19-0 607355-19-0 607355-19-0 607355-19-0 607355-19-0 607355-19-0 607355-19-0 607355-19-1 6

L21 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

● c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-19-1 CAPIUS CN 1H-Imidazolium, 1-{1-(4-amino-3-methylphenyl)-3-pyrrolidinyl}-3-[3-(trimethylsily)propyl]-, chloride (9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-20-4 CAPLUS CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● c1-

607355-21-5 CAPLUS 1,3'-Bipyrcolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9C1) (CA INDEX NAME)

€ c1 =

701975-28-2 CAPLUS
IH-Imidazolium, 1-[1-[4-amino-3-[2-(trimethylsilyl)ethyl]phenyl]-3pyrrolldinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 9 OF 23
ACCESSION NUMBER:
DOCUMENT NUMBER:
111:2542
Hair dyeing compositions comprising a tertiary cationic p-phenylenediamine with a pyrrolidine ring and a surfactant
Cotteret, Jean; Lagrange, Alain
L'oreal, Fr.
EUR PATEMENT TYPE:

DOCUMENT TYPE:
CODEN: EPXXDW

Patent

French

DOCUMENT TYPE: CALLANGUAGE: FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE 

OTHER SOURCE(S): MARPAT 141:42542
AB Hair dyeing compnise a tertiary cationic p-phenylenediamine with

pyrrolidine ring and a surfactant such as a glyceryl ether. Thus, a composition contained oleyl alc. 6, oleic acid 3, diglyceryl oleyl ether

US 2003-444654P

P 20030204

composition contained oleyl alc. 6, oleic acid 3, diglyceryl oleyl ether hexaglyceryl oleyl ether 6, diethylaminopropyl laurylaminosuccinamate sodium selt 3, ethoxylated oleylamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonium acctate 20, hexylene glycol 20, reducing agents 0.915, sequestrants 1, resorcinol 0.085, [1-44-aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride 1.0, 2-methyl-5-aminophenol 0.5, perfume qs, ammonia 10.2, and water qs to 100 g. The above composition was mixed with 6t H2O2 and applied onto hair. 607355-12-6 607355-18-6 807355-21-5 701975-28-2 701975-39-7 701975-3

IT

L21 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 701975-31-7 CAPLUS

CN 1H-Imidazolium, l-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

• c1

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L21 ANSWER 9 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-16-8 CAPLUS
CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methylchloride (9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-18-0 CAPLUS
CN 1H-Inidacolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

● c1-

Me3Si - (CH2)3

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-19-1 CAPLUS CN 1H-Tunidazolium, 1-{1-(4-amino-3-methylphenyl)-3-pyrrolidinyl}-3-[3-{trimethylsilyl)propyl}-, chloride (9CI) (CA INDEX NAME)

€ c1 =

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-20-4 CAPLUS CN 1,3'-Blyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 9 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 701975-31-7 CAPLUS

CN 1H-Imidazolium, 1-[1-[4-amino-3,5-bia[2-(trimethylsilyl)ethyl)phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

ONE OR HORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L21 ANSWER 9 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

• c1-

607355-21-5 CAPLUS 1,3'-Bipyrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

• c1

701975-28-2 CAPLUS
IH-Imidazolium, l-[1-[4-amino-3-[2-(trimethylsilyl)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:482169 CAPLUS
DOCUMENT NUMBER: 141:42541
Hair dyeing compositions comprising a tertiary p-phenylenediamine with a pyrrolidine ring and a benzomorpholine coupler
INVENTOR(S): Cottard, Francois; Rondeau, Christine PATENT ASSIGNEE(S): L'oreal, Fr.
SOURCE: EVENTOR CODEN: EPENTOR DOCUMENT TYPE: Pate. Appl., 53 pp.
CODEN: EPENTOR FRANCIS PARTIE FRENCH FRANCIS PROCESTED FRENCH F

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.						KIND DATE					APP	LICA	MOI	NO.		DATE				
	EΡ	1428	514			A1		2004	0616		ΕP	2003-	2931	39		2	0031	212		
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,		
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TR,	BG,	CZ,	EE,	HU,	sĸ			
	FR	2848	441			A1		2004	0618		FR	2002-	1577	4		2	0021	213		
	FR	2848	441			Bl		2005	0304											
	US	2004	2059	03		A1		2004	1021		บร	2003-	7352	88		2	0031	212		
PRIO	RIT	Y APP	LN.	INFO	.:						FR	2002-	1577	4	- 1	A 2	0021	213		
											US	2003-	4503	31P		P 2	0030	228		

AB Hair dyeing compns. comprise a tertiary p-phenylenediamine with a pyrrolidine ring and a benzomorpholine coupler. Thus, a composition contained

pyrrolidine ring and a benzomorpholine coupler. Thus, a composition alined oleyl alc. 6, oleic acid 3, polyglyceryl oleyl ether 12, diethylaminopropyl laurylaminosuccinamate sodium salt 3, ethoxylated oleylamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonlum acetate 20, propylene glycol 20, reducing agents 0.915, sequestrants 1, p-aminophenol 0.2, [1-(4-aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride 0.3, N.N-(2-Hydroxyethyl)-p-phenylenediamine sulfate 0.3, 6-hydroxybenzomorpholine 0.45, perfume qs, ammonia 10.2, and water qs to 100 g. 607355-12-4 607355-16-8 607355-12-5 701975-28-2 701975-31-7 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair dyeing compns. comprising cationic phenylenediamine with pyrrolidine ring and benzomorpholine coupler) H-Imidazolium, 1-(1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 607355-16-8 CAPLUS

CN 1H-Finidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-,
chloride (9CI) (CA INDEX NAME)

• c1-

- ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-18-0 CAPLUS
  CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl)-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

**○** c1-

607355-21-5 CAPLUS 1,3'-Bipyrrolidinium, 1'-{4-amino-3-methylphenyl}-1-methyl-, chloride (9CI) (CA INDEX NAME)

● c1-

701975-28-2 CAPLUS
1H-Imidazolium, 1-[1-[4-amino-3-[2-(trimethylsily1)sthyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-19-1 CAPEUS
CN 1H-Imidazolium, 1-{1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-[3(trimethylsilyl)propyl)-, chloride (9CI) (CA INDEX NAME)

• c1 =

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-20-4 CAPLUS
CN 1,3\*-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

- L21 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

● c1-

- ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

  RN 701975-31-7 CAPLUS

  CN 1H-Inidazoltum, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

COPYRIGHT 2006 ACS on STN
2004:482168 CAPLUS
141:42540
Hair dyeing compositions comprising a tertiary
p-phenylenedlamine with a pyrrolidine ring and a
opacifying or pearlescent agent
Cotteret, Jean, Lagrange, Alain
Lioreal, Fr.
SOURCE: Eur. Pat. Appl., 50 pp.
CODEN: EPXXDW
FOOLUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:

PATENT NO.

PATENT NO.

EP TINFORMATIUM:

PATENT NO. KIND DATE APPLICATION NO. DATE

EP 1428513 A1 20040616 EP 2003-293138 20031212

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, FT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

FR 2848440 A1 20040618 FR 2002-15773 20021213

US 2004250356 A1 20041216 US 2003-735258 20031212

TWW ABPIN. INFO: PRIORITY APPLN. INFO.: US 2003-450353P P 20030228

OTHER SOURCE(S):

MARRAT 141:42540

AB Hair dyeing compns. comprise a tertiary p-phenylenediamine with a pyrrolidine ring and a opacifying or pearlescent agent. Thus, a composition

contained Nafol 20-22 3, Marlipal-2022/300 1, ethoxylated stearyl alc. 6.25, oleic acid 2.6, carbopol-980 0.6, Aculyn-44 4, Flonac FS20C 0.25, coco fatty acid monoisopropanolamide 3, cationic polymer 4, propylene glycol 6, sodium metasulfite 0.71, EDTA 0.2, tert-butylhydroquinone 0.3, 3-[1-(4-aminophenyl)pyrrolidin-3-yl]-l-methyl-3H-l-imidazolium chloride 0.8, 5-N(B-hydroxyethykamino-2-methylphenol) 0.4, monoethanolamine 1, perfume qs, armonia 11, and water qs to 100 g. The above composition was mixed with 68 H2O2 and applied onto hair. 607355-12-4 607355-16-8 607355-18-0 607355-19-1 607355-20-4 607355-21-5 701975-28-2 701975-31-7

RL COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair dyeing compns. comprising phenylenediamine with pyrrolidine ring and opacifying or pearlescent agents)

RN 607355-12-4 CAPLUS

N 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

● c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-19-1 CAPLUS
CN IH-findazolium, 1-{1-(4-amino-3-methylphenyl)-3-pyrrolidinyl}-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

● c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-20-4 CAPLUS
CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA
INDEX NAME)

L21 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-16-8 CAPLUS CN H-Imidazolium, 1-(1-(4-amino-3-methylphenyl)-3-pyrrolidinyl|-3-methyl-, chloride (9CI) (CA INDEX NAME)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-18-0 CAPIUS
CN 1H-Inidazolium, l-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

607355-21-5 CAPLUS 1,3'-Bipyrrolidinium, 1'-{4-amino-3-methylphenyl}-1-methyl-, chloride (9CI) (CA INDEX NAME)

• c1 -

701975-28-2 CAPLUS
1H-Imidazolium, 1-[1-[4-amino-3-[2-(trimethylsilyl)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAMZ)

L21 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

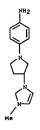
• c1 PRIORITY APPLN. INFO.: US 2003-451255P ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 701975-31-7 CAPIUS

CN 1H-Tunidazolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsily1)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME) R SOURCE(S): MARPAT 141:42539 Hair dyeing compns. comprise a tertiary cationic p-phenylenediamine with OTHER SOURCE(S): pyrrolidine ring and a p-aminophenol. Thus, a composition contained oleyl alc. t aic.
6, oleic acid 3, polyglyceryl oleyl ether 12, diethylaminopropyl laurylaminosuccinamate sodium salt 3, ethoxylated oleylamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20, lane.

CH2-CH2-SiMe3 • c1-

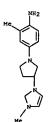
L21 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 607355-16-8 CAPLUS

CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl)-3-methyl-,
chloride (9C1) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-18-0 CAPLUS
CN 1H-Inidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L21 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:482167 CAPLUS
DOCUMENT NUMBER: 141:42539
Hair dyeing compositions comprising a tertiary cationic p-phenylenedlamine with a pyrrolidine ring and a p-aminophenol

LINVENTOR(S): Cotteret, Jean; Lagrange, Alain
L'oreal, Fr.
EUr. Pat. Appl., 51 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Path

cunoxylated alkyl ether monoethanolamide 10, ammonium acetate 20, 
'lene
glycol 20, reducing agents 0.915, sequestrants 1, a p-aminophenol 0.2,
[1-(4-aminophenyl)pyrrolldin-3-ylltrimethylammonium chloride 0.8,
2-methyl-3-aminophenol 0.5, perfume qs, ammonia 10.2, and water qs to 100
g. The above composition was mixed with 6% H2O2 and applied onto hair.
607355-12-4 607355-16-6 607355-18-0
607355-19-2-2 701975-31-7
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hair dyeing compons. comprising cationic phenylenediamine with
pyrrolldine ring and aminophenol)
607355-12-4 CAPLUS
(H-Imidazolium, 1-(1-(4-aminophenyl)-3-pyrrolldinyl)-3-methyl-, chloride
(9CI) (CA INDEX NAME)

KIND DATE APPLICATION NO.

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.

hexylene

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-19-1 CAPEUS RN 18-Timidazolium, 1-{1-(4-amino-3-methylphenyl)-3-pyrrolidinyl}-3-{3-(trimethylsilyl)propyl}-, chloride (9CI) (CA INDEX NAME)

● c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-20-4 CAPLUS
CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA
INDEX NAME)

607355-21-5 CAPLUS 1,3'-Bipyrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9C1) (CA INDEX NAME)

701975-28-2 CAPLUS

TH-Imidazolium, 1-[1-[4-amino-3-[2-(trimethylsily1)ethyl]phenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
DOCUMENT NUMBER:
141:42538
Hair dyeing compositions comprising a tertiary
p-phenylenediamine with a pyrrolidine ring and a
cationic polymer
Cotteret, Jean: Lagrange, Alain
L'Oreal, Fr.
EUR. Pat. Appl., 49 pp.
CODEN: EPXXDW
PAMENT TYPE:
LANGUAGE: French
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

EP 1428511 A1 20040616 EP 2003-293136 20031212

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
FR 2848432 A1 20040618 FR 2002-15765 20021213

US 2004231068 A1 20041125 US 2003-735249 20031212

PRIORITY APPLN. INFO.: FR 2002-15765 A 20021213 US 2003-450326P P 20030228

OTHER SOURCE(S): MARPAT 141:42538

AB Hair dyeing compns. comprise a tertiary p-phenylenediamine with a pyrrolidine ring and a cationic polymer. Thus, a composition contained oleic

pyrrolidine ring and a cationic polymer. Thus, a composition contained oleic

acid 9, polyglyceryl oleyl ether 12, diethylaminopropyl laurylaminosuccinamate sodium salt 3, ethoxylated oleylamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20, hexylene
glycol 20, reducing agents 0.915, sequestrants 1, resorcinol 0.085, [1-(4-aminophenyl) pyrrolidin-3-ylltrimethylammonium chloride 1.0, 2-methyl-5-aminophenol 0.3, perfume qs, ammonia 10.2, and water qs to 100 g. The above composition was mixed with 61 H2O2 and applied onto hair.

IT 607355-12-4 607355-12-6 607355-12-5
701975-29-2 701975-31-7
RL: CO3 (Cosmetic use); BIOL (Biological study); USES (Uses) (hair dyeing compns. comprising phenylenediamine with pyrrolidine ring and cationic polymer)

RN 607355-12-4 CAPLUS

CN 1H-Imidazolium, 1-(1-(4-aminophenyl)-3-pyrrolidinyl)-3-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

● c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

701975-31-7 CAPLUS
CN 1H-Inidazolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L21 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 607355-16-8 CAPLUS

CN | H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-,
chloride (9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607335-18-0 CAPLUS
CN 1H-Inidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl)-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-19-1 CAPLUS CN 1H-Indiazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

● c1 =

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-20-4 CAPLUS
CN 1,3'-Blyprolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA
INDEX NAME)

L21 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

• c1

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 701975-31-7 CAPLUS
CN 1H-Inidazolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

• c1-

607355-21-5 CAPLUS 1,3'-Bipyrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

• c1

701975-28-2 CAPLUS
IH-Imidazolium, l-[1-[4-amino-3-[2-(trimethylsily1)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:482165 CAPLUS
DOCUMENT NUMBER: 141:59175
Hair dyeing compositions comprising a tertiary p-phenylenediamine with a pyrrolidine ring and a heterocyclic coupler or a hydroxybenzamide cotteret, Jean; Lagrange, Alain
LORGERY FR.
SOURCE: EVENTOR (5): EPIXLDW
DOCUMENT TYPE: Path

DOCUMENT TYPE: Patent

LANGUAGE: French 1

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE PATENT NO. KIND DATE APPLICATION NO. DATE

EP 1428510 Al 20040616 EP 2003-293135 20031212

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, 1E, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
FR 284843 Al 20040618 FR 2002-15767 20021213
US 2004231067 Al 20041125 FR 2002-15767 A 20021213 US 2004231067 PRIORITY APPLN. INFO.: P 20030228

OTHER SOURCE(S): MARPAT 141:59175

AB Hair dyeing compns. comprise a tertiary p-phenylenediamine with a pyrrolidine ring and a heterocyclic coupler or a hydroxybenzamide. The a composition contained oleyl alc. 6, oleic acid 3, polyglyceryl oleyl

US 2003-450322P

r
12, diethylaminopropyl laurylaminosuccinamate sodium salt 3, ethoxylated oleylamine 7, ethoxylated aikyl ether monoethanolamide 10, ammonium acetate 20, hexylene glycol 20, reducing agents 0.915, sequestrants 1, [1-(4-aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride 0.8, 6-methoxy-2,3-diaminopyridine 0.5, perfume ga, ammonia 10.2, and water gs to 100 g. The above composition was mixed with 6% H202 and applied onto

hair. IT

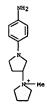
607355-12-4 607355-16-8 607355-18-0 607355-19-1 607355-19-1 607355-20-4 607355-21-5 701975-28-2 701975-28-2 701975-28-2 Foliar Commercial Comme

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-16-8 CAPLUS CN H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl)-3-methyl-, chloride (9CI) (CA INDEX NAME)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-18-0 CAPLUS CN 1H-Inidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● c1-

607355-21-5 CAPLUS
1,3'-Bipyrrolidinium, 1'-{4-amino-3-methylphenyl}-1-methyl-, chloride
(9CI) (CA INDEX NAME)

● c1 -

701975-28-2 CAPLUS
1H-Imidazolium, 1-{1-[4-amino-3-[2-(trimethylsilyl)ethyl]phenyl]-3pyrrolidinyl}-3-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-19-1 CAPEUS

CN IN-Tunidazolium, 1-(1-(4-amino-3-methylphenyl)-3-pyrrolidinyl)-3-{3-(trimethylsilyl)propyl)-, chloride (9CI) (CA INDEX NAME)

Me3Si - (CH2)3

● c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-20-4 CAPLUS
CN 1,3'-Bipyrrolidinium, 1'-{4-aminophenyl}-1-methyl-, chloride (9CI) (CA
INDEX NAME)

L21 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 701975-31-7 CAPLUS
CN 1H-Imidazolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsily1)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

L21 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
DOCUMENT NUMBER:
141:42537
1TILE:
141:42537
1Hair dyeing compositions comprising a tertiary p-phenylenediamine with a pyrrolidine ring and a polyol
INVENTOR(S):
Cotteret, Jean; Lagrange, Alain
L'oreal, Fr.
SOURCE:
Eur. Pat. Appl., 50 pp.
CODEN: EPXXDW
DOCUMENT TYPE:
LANGUAGE:
PATENT INFORMATION:
1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE EP 1428509 Al 20040616 EP 2003-293134 20031212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK,
FR 2648438 Al 20040618 FR 2002-15771 20021213
US 2004226109 Al 20041118 US 2003-734653 20031212
PRIORITY APPLN. INFO.: FR 2002-15771 A 20021213 US 2003-444648P P 20030204

OTHER SOURCE(S): MARPAT 141:42537

AB Hair dyeing compns. comprise a tertiary p-phenylenediamine with a pyrrolidine ring and a polyol. Thus, a composition contained oleic acid

pyrrolidine ring and a polyol. Thus, a composition contained oleic acid polyglyceryl oleyl ether 12, diethylaminopropyl laurylaminosuccinamate sodium salt 3, ethoxylated oleylamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonlum acetate 20, hexylene glycol 20, reducing agents 0.915, sequestrants 1, resorcinol 0.085, [1-(4-aminophenyllpyrrolidin-3-yl]trimethylammonium chloride 1.0, 2-methyl-5-aminophenol 0.5, perfume qs, ammonia 10.2, and water qs to 100 g. The above composition was mixed with 6% H2O2 and applied onto hair. 607355-12-4 607355-18-0 607355-18-0 607355-19-1 607355-21-5 701975-29-2 701975-31-7
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair dyeing compns. comprising phenylenediamine with pyrrolidine ring and polyol) 607355-12-4 CAPLUS 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

● c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-19-1 CAPLUS
CN IH-findazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

● c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-20-4 CAPLUS
CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA
INDEX NAME)

L21 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 607355-16-8 CAPLUS

CN 1H-Imidazolium, 1-{1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-,
chloride (9C1) (CA INDEX NAME)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-18-0 CAPLUS

CN 1H-Inidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

607355-21-5 CAPLUS 1,3'-Bipyrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

701975-28-2 CAPLUS
IH-Imidazolium, 1-[1-[4-amino-3-[2-(trimethylsilyl)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NUME)

L21 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 701975-31-7 CAPLUS
CN 1H-Imidazolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{NH}_2 \\ \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{SiMe3} \\ \\ \text{N} \\ \\ \text{N} \\ \\ \text{Me} \end{array}$$

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L21 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

● c1 =

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-16-8 CAPIUS
CN 1H-Inidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

€ c1 ~

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-18-0 CAPLUS CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl)-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:482163 CAPLUS

DOCUMENT NUMBER: 141:42536

Hair dyeing compositions comprising a tertiary p-phenylenediamine with a pyrrolidine ring and a monosaccharide or disaccharide

Cotteret, Jean: Lagrange, Alain

L'oreal, Fr.

SOURCE: EVEX.DW

DOCUMENT TYPE: Pat. Appl., 50 pp.

CODE: EVEX.DW

PATENT INFORMATION: French

FAMILY ACC. NUM. COUNT: 1

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. APPLICATION NO. KIND DATE DATE PRIORITY APPLN. INFO .:

US 2003-444623P P 20030204

OTHER SOURCE(S): MARPAT 141:42536

AB Hair dyeing compns. comprise a tertiary p-phenylenediamine with a pyrrolidine ring and a monosaccharide or disaccharide. Thus, a composition

osition
contained oleic acid 9, polyglyceryl oleyl ether 12, diethylaminopropyl
laurylaminosuccinamate sodium salt 3, ethoxylated oleylamine 7,
ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20,

hexylene
glycol 20, reducing agents 0.915, saccharose 1, sequestrants 1,
resorcinol
0.085, [1-(4-aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride 1.0,
2-methyl-5-aminophenol 0.5, perfume qs, ammonia 10.2, and water-qs to 100
g. The above composition was mixed with 6% H2O2 and applied onto hair.
IT 607355-12-4 607355-16-8 607355-18-0
607355-19-1 607355-20-4 607355-21-5
701975-28-2 701975-31-3 H7O1 (Biological studyl) HSFS (Hear)

701975-28-2 701975-31-7
RI: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hair dyeing compns. comprising phenylenediamine with pyrrolidine ring and monosaccharide or disaccharide)
607355-12-4 CAPLUS
IH-Indacollum, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride
(SCI) (CA LUNDEX NAME)

L21 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

• c1~

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-19-1 CAPIUS
CN IN-Tunidazolium, 1-[1-{4-amino-3-methylphenyl}-3-pyrrolidinyl}-3-[3-(trimethylsilyl)propyl}-, chloride (9CI) (CA INDEX NAME)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-20-4 CAPLUS
CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA
INDEX NAME)

607355-21-5 CAPLUS 1,3'-Bipyrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

• c1 -

701975-28-2 CAPLUS
1H-Imidazolium, 1-[1-[4-amino-3-[2-(trimethylsily1)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 17 OF 23
ACCESSION NUMBER:
DOCUMENT NUMBER:
11:42535
Hair dyeling composition comprising a cationic p-phenylenediamine with a pyrrolidine ring and a dicarboxylic acid

INVENTOR(S):
FATENT ASSIGNEE(S):
SOURCE:
L'oreal, Fr.
SOURCE:
CODEN: EPXXDW
PATENT INFORMATION:
FAMILY ACC. NUM. COUNT:
FAMILY ACC. NUM. CO

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

KIND DATE PATENT NO.

## PATENT NO. KIND DATE APPLICATION NO. DATE

### PATENT NO. KIND DATE APPLICATION NO. DATE

### PATENT NO. CONTROL OF THE PATENT NO. CONTROL OF THE

US 2003-450344P P 20030228

APPLICATION NO.

DATE

OTHER SOURCE(S): MARPAT 141:42535

AB Hair dyeing compns. comprise a cationic p-phenylenediamine with a pyrrolidine ring and a dicarboxylic acid. Thus, a composition contained oleic

acid 9, polyglyceryl oleyl ether 12, diethylaminopropyl laurylaminosuccinamate sodium salt 3, ethoxylated oleylamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20, propylene glycol 20, dilinoleic acid 1.5, reducing agents 0.915, sequestrants 1, resorcinol 0.085, [1-(4-aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride 1.0, 2-methyl-5-aminophenol 0.5, perfume

qs, ammonia 10.2, and water qs to 100 g. The above composition was mixed

with

H202 and applied onto hair.

H202 and applied onto hair.

H203 and applied onto hair.

H204 and applied onto hair.

H205 and applied onto hair.

H207 and applied onto hair.

H207 and H207 and

Me3S1-CH2-

● c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 701975-31-7 CAPLUS
CN 1H-Inidazolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl)phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

• c1

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L21 ANSWER 17 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-16-8 CAPLUS
CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-,
chloride (9C1) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607335-18-0 CAPLUS
CN 1H-Inidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

Me3Si - (CH2)3 ● c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN  $\,\,$  607355-19-1 CAPLUS

ov:303-19-1 CAPLUS IH-Imidacolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

€ c1 \*

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-20-4 CAPLUS CN 1,3'-Blpyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 17 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

● c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 701975-31-7 CAPIUS
CN 1H-Inidazoltum, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L21 ANSWER 17 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

● c1 -

607355-21-5 CAPLUS 1,3'-Bipyrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

• c1

701975-28-2 CAPLUS
1H-Inidazolium, 1-[1-[4-amino-3-[2-(trimethylsilyl)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:482161 CAPLUS
DOCUMENT NUMBER: 141:42534
Hair dyeing composition comprising p-phenylenediamine with a pyrrolidine ring and a polymer
Cotteret Jean: Lagrange, Alain
Loreal, Fr.
SOURCE: EUR. Pat. Appl., 53 pp.
COEMENT TYPE: EUR. PAT. APPL., 53 pp.
COEMINIT TYPE: PAT. APPL., 53 pp.
COEMINIT TYPE: PAT. APPL., 53 pp.
FRAMILY ACC. NUM. COUNT: 1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PAT	ENT	NO.			KIN	•	DATE		A	PPI	ICAT:	NO1	ΝО.		D	ATE	
									-						-		
EP	1428	506			A1		2004	0616	E	P 2	2003-2	2931	31		2	0031	212
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	ΗU,	sĸ	
FR	2848	433			Al		2004	0618	F	R 2	2002-	1576	6		2	0021	213
US	2004	2162	46		Al		2004	1104	U:	5 2	003-1	7355	24		2	0031	212
PRIORITY	APP	LN.	INFO.	:					F	R 2	002-	1576	6	1	4 2	0021	213
									U	5 2	003-4	4503	38P		2	0030	228

AB Hair dyeing composition comprise p-phenylenediamine with a cationic pyrrolidine

pyrrolidine ring and a polymer with fatty chains. Thus, a composition contained oleic acid

oleic acid

9, polyglyceryl oleyl ether 12, diethylaminopropyl laurylaminosuccinamate sodium salt 3, ethoxylated oleylamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20, hexylated oleyleng lycol 20, reducing agents 0.915, sequestrants 1, [1-(4-aminophenyl)pyrrolidin-3-ylltrimethylammonium chloride 0.8, ACP-1234 0.2, 2-methyl-5-aminophenol 0.5, perfume qs, ammonia 10.2, and water qs to 100 g. The above composition

Waa mixed with 5, 220

osition
was mixed with 6% H2O2 and applied onto hair.
607335-12-4 607335-16-8 607335-18-0
607335-19-1 607335-20-4 607335-21-5
701975-26-2 701975-31-7
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hair dyeing composition comprising phenylenediamine with pyrrolidine

ring

and polymer)
607355-12-4 CAPLUS
1H-Inidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride
(9CI) (CA INDEX NAME)

(Continued)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-16-8 CAPIUS
CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-,
chloride (9CI) (CA INDEX NAME)

● c1-

- ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-18-0 CAPLUS
  CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

● c1-

607355-21-5 CAPLUS
1,3'-Bipyrrolidinium, l'-{4-amino-3-methylphenyl}-1-methyl-, chloride
(9CI) (CA INDEX NAME)

● c1 -

701975-28-2 CAPLUS
IH-Imidazolium, 1-[1-[4-amino-3-[2-(trimethylsily1)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-19-1 CAPIUS
CN 1H-Imidazolium, 1-{1-(4-amino-3-methylphenyl)-3-pyrrolidinyl}-3-[3(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

● c1=

- ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
  RN 607355-20-4 CAPLUS
  CN 1,3'-Bipyrrolidinium, 1'-{4-aminophenyl}-1-methyl-, chloride (9CI) (CA
  INDEX NAME)
- L21 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

- ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
  RN 701975-31-7 CAPLUS
  CN lH-Imidazolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE

TAMBOT

L21 ANSWER 19 OF 23 CAPLUS COPYRIGHT 2006 ACS ON STN ACCESSION NUMBER: 2004:482160 CAPLUS DOCUMENT NUMBER: 141:42533

141:42533
Hair dyeing compositions comprising a cationic tertiary p-phenylenediamine with a pyrrolidine ring and a cationic heterocyclic direct dye Cotteret, Jean: Lagrange, Alain L'oreal, Fr. Eur. Pat. Appl., 104 pp. CODEN: EPXXDW TITLE:

INVENTOR (5):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: C.
LANGUAGE: F
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT	KIN		,	<b>APP</b>	LICAT	DATE												
					-													
EP 142	8505			A1		2004	0616	1	EΡ	2003-	-2931	30		2	20031	212		
R:	AT,	BE.	CH.	DE,	DK,	ES.	FR,	GB,	GR	, IT.	LI.	LU,	NL,	SE,	MC,	PT,		
	IE.	SI.	LT.	LV.	FI.	RO.	MK.	CY,	AL	TR.	BG,	CZ,	EE.	HU,	SK			
FR 284	8439			Al		2004	0618	1	R	2002-	1577	2		2	0021	213		
US 200	42213	99		A1		2004	1111		JS	2003-	7352	59		2	0031	212		
PRIORITY AP	PLN.	INFO	.:					1	FR	2002-	1577	2		A 2	20021	213		
														_				
										2003-				D 7	0030			

R SOURCE(S): MARPAT 141:42533
Hair dyeing compns. comprise a cationic tertiary p-phenylenediamine with OTHER SOURCE(S): AB Hair dyeing

pyrrolidine ring and a cationic heterocyclic direct dye. Thus, a sition

pyrrolidine ring and a cationic neterocyric direct dye. Inns, a composition contained oleic acid 9, polyglyceryl oleyl ether 12, diethylaminopropyl laurylaminosuccinamate sodium salt 3, ethoxylated oleylamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20, propylene glycol 20, dilinoleic acid 1.5, reducing agents 0.915, sequestrants 1, resorcinol 0.085, [1-(4-aminophenyl)pyrrolidin-3-yyltrimethylammonium chloride 1.0, 2-methyl-5-aminophenol 0.5, niacinamide
0.2, perfume qs, ammonia 10.2, and water qs to 100 g. The above composition
(50 g) was mixed with oxygenated water and 0.2 g Basic Red-51.
If 607355-12-4 607355-16-8 607355-18-0 .
607355-19-1 607355-20-4 607355-21-3
701975-20-2 701975-31-7
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair dyeing compns. comprising cationic tertiary phenylenediamine with

pyrrolidine ring and cationic heterocyclic direct dye)
607355-12-4 CAPAUS
1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride
(9CI) (CA INDEX NAME)

L21 ANSWER 19 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

● c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-19-1 CAPIUS
CN lH-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (SCI) (CA INDEX NAME)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-20-4 CAPLUS
CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA
INDEX NAME)

L21 ANSWER 19 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

● c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-16-8 CAPLUS
CN 1H-Imidazoltum, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-,
chloride (9C1) (CA INDEX NAME)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-18-0 CAPLUS CN 1H-Indazolium, l-[1-(4-aminophenyl)-3-pyrrolidinyl)-3-{3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 19 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

607355-21-5 CAPLUS 1,3'-Bipyrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

701975-28-2 CAPLUS
IH-Imidazolium, l-[1-[4-amino-3-(2-(trimathylsilyl)ethyl]phenyl]-3pytrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 19 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

• c1

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 701975-31-7 CAPLUS

CN 1H-Tunidazolium, 1-[1-[4-amino-3,5-bia[2-(trimethylsilyl)ethyl]phenyl]-3pyrrolidinyl)-3-methyl-, chloride (9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 20 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) study); PREP (Preparation); USES (Uses) (oxidn. base in dyeing; prepn. of bis-paraphenylenediamines comprising pyrrolidine groups as dyes for keratinic fibers) 667914-90-1 CAPLUS (CAPLUS (Laptopanediyl)) bis [3-[1-(4-aminophenyl)-3-pyrrolidinyl]-, dibromide, dihydrobromide (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

●2 HBr

L21 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2004:200101 CAPLUS DOCUMENT NUMBER: 140:235596 Preparation of his Preparation of bis-paraphenylenediamines comprising pyrrolidine groups and their use as dyes for

keratinic

fibers
Sabelle, Stephane; Ramos, Laure; Leduc, Madeleine
L'Oreal, Fr.
Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW

INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Patent

LANGUAGE: French FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE 1396486 A1 20040310 EP 2003-292177 20030904
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
2844271 A1 20040312 FR 2002-11133 20020909
2004123401 A1 20040701 US 2003-657245 20030909
6923835 B2 20050802
APPIN INFO EP 1396486 FR 2844271 US 2004123401 US 6923835 PRIORITY APPLN. INFO.: FR 2002-11133 A 20020909

> US 2002-431713P P 20021209

OTHER SOURCE(S): MARPAT 140:235596

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Title compds. I [wherein n, n' = independently 0-4; when n, n'  $\geq$  2, R1 and R2 can be identical or different; R1, R2 = independently H, (un) substituted aliphatic, alicyclic, saturated or unsatd. hydrocarbon n with

n with at least one carbon replaced by one or more O, N, Si, S, SO, or SO2; R1 and R2 never include peroxide bond, diazo, NO2, or NO; A = covalent bond or (un)aubstituted alkylene chain with at least one carbon replaced by an ammonium radical and/or by O, S, SiN, CO, SO, SO2; R6, R7 = independently H, CO2H and derivs., alkyl/dialkyl/carbamoyl, trialkylsilane, trialkylammonium, N-alkylimidazolium, (un)substituted alkyl, R8, R9 = independently H, OH, alkoxy, monoalkyl/dialkyl/amino, thiol, CO2H and derivs., alkyl/dialkyl/carbamoyl, trialkylsilane, trialkylammonium, N-alkylimidazolium, (un)substituted alkyl } were prepared as oxidation

for dyeing keratinous fibers, in particular human hair fibers. For example, II=Cl-=2HCl was prepared alkylation of [1-(4-nitrophenyllpyrrolidin-3-yl]dimethylamine with 1,6-dibromohexane in MeOH at reflux for 6 h, followed by Pd/C hydrogenation at 10 Barr and 65'. Formulations of II in acidic medium gave blue-violet shades. 667914-90-19 667914-95-69 667914-96-79, 1,3-Bis[1-(4-aminophenyllpyrolidin-3-yl]-1H-imidazol-3-ium chloride 667914-97-89, 1,4-Bis[1-(4-aminophenyllpyrolidin-3-yl]-1,4-dimethylpiperazinediium dichloride 667914-99-09 667915-11-99 667915-12-55-59
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological

L21 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 667914-95-6 CAPLUS CN lH-Imidazolium, 1,1'-(1,6-hexanediyl)bis{3-[1-(4-aminophenyl)-3-pytrolidinyl]-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 657914-96-7 CAPLUS (1-(4-aminophenyl)-3-pyrrolidinyl)-, chloride

PAGE 2-A

- ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

  RN 667914-97-8 CAPLUS

  CN Piperazinium, 1,4-bis[1-(4-aminophenyl)-3-pyrrolidinyl]-1,4-dimethyl,
  dichloride (9CI) (CA INDEX NAME)

L21 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 2-A

●2 C1-

- 667915-11-9 CAPLUS
  1H-Imidazolium, 1,1'-(1,3-propanediyl)bis[3-[1-(4-aminophenyl)-3-pyrrolidinyl]-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A

L21 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

667914-99-0 CAPLUS
1,4-Diazoniabicyclo{2.2.2}octane, 1,4-bia{1-{4-aminophenyl}-3-pyrrolidinyl}-, dichloride {9CI} (CA INDEX NAME}

PAGE 1-A

PAGE 2-A

121 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

●2 C1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 667915-25-5 CAPLUS CN 1,3'-Bipyrrolidinium, 1,1''-(1,6-hexanediyl)bis(1'-(4-aminophenyl)-, dichloride (9C1) (CA INDEX NAME)

●2 c1-

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L21 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2006 ACS ON STN ACCESSION NUMBER: 2004:17396 CAPLUS DOCUMENT NUMBER: 140:81854 140:81854
Hair dyeing compositions containing
pyrrolidinyl-p-phenylenediamine derivatives
Sabelle, Stephane: Ramos, Laure; Leduc, Madeleine
L'Oreal, Fr.
Eur. Pat. Appl., 21 pp.
CODEN: EPXXDW
Patent
French DOCUMENT NUMBER: INVENTOR(S): PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

EP 1378230 A1 20040107 EP 2003-291616 20030701
R: AT, BE, CH, DE, DK, ES, FR, CB, GR, IT, LI, LU, NL, SE, MC, FT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK,
FR 2841780 A1 20040109 FR 2002-8514 20020705
FR 2841780 B1 20040910
JP 2004035559 A2 20040205 JP 2003-271500
US 2004077852 A1 20040422 US 2003-612007
PRIORITY APPLN. INFO: P 20020909 US 2002-408900P

OTHER SOURCE(S): MARPAT 140:81854
AB Pyrrolidinyl-p-phenylenediamine derivs. are useful for the dyeing of human

n hair fibers. Thus, 4-(3-imidazol-1-ylpyrrolidin-1-yl)phenylamine-HCl was prepared by the mesylation of N-(4-nitrophenyl)-3-hydroxypyrrolidine in THE

in the presence of Et3N followed by the reaction of the product with imidazole and hydrogenation. A formulation contained the above compoun 0.001, 2-(2,4-diaminophenoxyethanol)-2HCl 0.001, a support formulation

water qs to 100 g. 640725-42-4 640725-44-6 640725-45-7 640725-52-6 640725-53-7 640725-54-8 640725-55-9 640725-56-0 640725-59-3 640725-60-6

640725-60-6 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair dyeing compns. containing pyrrolidinylphenylenediamine derivs.) 640725-42-4 CAPLUS Benzenamine, 4-[3-(1H-1,2,4-triazol-1-yl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)

L21 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

640725-53-7 CAPLUS Benzenamine, 2-methyl-4-[3-(1H-1,2,4-triazol-1-yl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)

640725-54-8 CAPLUS
Benzenamine, 4-{1,3'-bipyrrolidin}-1'-yl-2-methyl- (9CI) (CA INDEX NAME)

640725-55-9 CAPLUS

L21 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

640725-44-6 CAPLUS Benzenamine, 4-[3-(4-methyl-1-piperazinyl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)

NH2

640725-45-7 CAPLUS
Benzenamine, 4-[3-{hexahydro-4-methyl-1H-1, 4-diazepin-1-yl}-l-pyrrolidinyl]- [9CI] (CA INDEX NAME)

640725-52-6 CAPLUS Benzenamine, 4-{3-(lH-imidazol-1-yl)-1-pyrrolidinyl}-2-methyl- (9CI) (CA INDEX NAME)

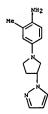
L21 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
CN Benzenamine, 2-methyl-4-[3-(4-methyl-1-piperazinyl)-1-pyrrolidinyl](9CI) (CA INDEX NAME)

640725-56-0 CAPLUS
Benzenamine, 4-(3-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-1-pyrrolidinyl]-2-methyl- (9CI) (CA INDEX NAME)

640725-59-3 CAPLUS Benzenamine, 4-[3-(1H-pyrazol-1-yl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)

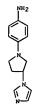
RN 640725-60-6 CAPLUS

L21 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
CN Benzenamine, 2-methyl-4-{3-(1H-pyrazol-1-y1)-1-pyrrolidinyl}- (9CI) (CA INDEX NAME)



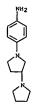
IT

640725-40-2P 640725-43-5P 640725-65-1P
640723-65-2P
RL: COS (Cosmetic use); SFN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(hair dyeing compns. containing pyrrolidinylphenylenediamine derivs.)
640725-40-2 CRPLUS
Benzenamine, 4-[3-(1H-imidazol-1-yl)-1-pyrrolidinyl]- (9CI) (CA INDEX NRME)



640725-43-5 CAPLUS Benzenamine, 4-[1,3'-bipyrrolidin]-l'-yl- (9CI) (CA INDEX NAME)

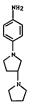
L21 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



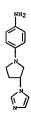
● HC1

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE REFERENCE COUNT:

L21 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN



640725-65-1 CAPLUS
Benzenamine, 4-(3-(1H-imidazol-1-yl)-1-pyrrolidinyl)-, monohydrochloride
(9C1) (CA INDEX NAME)



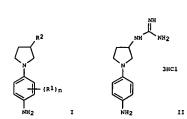
640725-66-2 CAPLUS Benzenamine, 4-[1,3'-bipyrrolidin]-1'-yl-, monohydrochloride (9CI) (CA INDEX NAME)

L21 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:771366 CAPLUS
DOCUMENT NUMBER: 139:276614
Preparation of aminophenylpyrrolidines as dyes for keratinic fibers
Sabelle, Stephane; Ramos, Laure; Leduc, Madeleine; Philippe, Michel
PATENT ASSIGNEE(S): Sabelle, Stephane; Ramos, Laure; Leduc, Madeleine; Philippe, Michel
PATENT ASSIGNEE(S): Eur. Pat. Appl., 4 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: PRANLLY ACC. NUM. COUNT: 1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.						KIND DATE			APPLICATION NO.								DATE			
															-					
EP	1348	695			Al 20031001			EP 2003-290597								20030311				
	R:	AT,	BΕ,	CH,	DE,	DK,	ES,	FR,	GB,	GF	ι, 1	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑI	., 1	rR,	BG,	CZ,	EE,	ΗU,	SK			
FR	2837	821			A1		2003	1003		FR	200	02-	3847			2	0020	327		
FR	2837	821			B1		2005	0311												
JP	2003	2862	56		A2		2003	1010		JΡ	200	3-	8939	0		2	0030	327		
US	2003	2299	49		Al		2003	1218	1	US	200	3-:	3972	45		2	0030	327		
US	2004	1942	27		A9		2004	1007												
US	6946	005			B2		2005	0920												
PRIORIT	Y APP	LN.	INFO	.:					1	FR	200	02-	3847			A 2	0020	327		
										US	200	02-	3874	99P		P 2	0020	611		

OTHER SOURCE(S): MARPAT 139:276814



Aminophenylpyrrolidines I (R1 = halogen, (un)substituted alkyl, onium; n

0-4; R2 = quaternery ammonium| were prepared for use as hair dyes. Thus, 4-FC6H4NO2 was treated with 3-acetylaminopyrrolidine, followed by deacetylation, conversion to quanidine, and reduction to give the dye II, which gave blue-violet shades in alkaline medium. 607334-86-9P 607354-93-8P 607355-03-5P 607355-03-5P 607355-03-5P

L21 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
6073S5-12-4P 6073S5-16-6P 6073S5-18-0P
6073S5-19-1P 6073S5-20-4P 6073S5-21-5P
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of aminophenylpyrrolidines as dyes for keratinic fibers)
RN 6073S4-86-9 CAPLUS
CN IH-Inidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride, monohydrochloride (9CI) (CA INDEX NAME)

• ci-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607354-93-8 CAPLUS CN 1,3'-8-ibyrrolidinium, 1'-{4-aminophenyl}-1-methyl-, chloride, monohydrochloride (9CI) (CA INDEX NAME)

L21 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

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607335-05-5 CAPLUS
Pyridinium, 1-{1-{4-aminophenyl}-3-pyrrolidinyl}-, acetate (9CI) (CA
INDEX NAME)

CRN 607355-04-4 CMF C15 H18 N3

RN 607355-09-9 CAPLUS
CN 4-Aza-1-azoniabicyclo[2.2.2]octane,
1-[1-(4-aminophenyl)-3-pyrrolidinyl]-,
methanesulfonate, monohydrochloride (9CI) (CA INDEX NAME)

CRN 607355-08-8 CMF C16 H25 N4

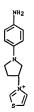
L21 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
RN 607354-98-3 CAPLUS
CN 1H-Inidazoltum, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methylchloride, monohydrochloride (9CI) (CA INDEX NAME)

● c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-02-2 CAPLUS
CN Thiazolium, 3-(1-(4-aminophenyl)-3-pyrrolidinyl)-, acetate (9CI) (CA INDEX NAME)

CM 1

CRN 607355-01-1 CMF C13 H16 N3 S



CM 2

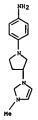
CRN 71-50-1 CMF C2 H3 O2

L21 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CN 2

CRN 16053-58-0 CMF C H3 03 S

607355-12-4 CAPLUS
1H-Imidazolium, 1-[1-[4-aminophenyl]-3-pyrrolidinyl]-3-methyl-, chloride
(9CI) (CA INDEX NAME)



L21 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE RN 607355-16-8 CAPIUS
CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● c1-

OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE 607355-18-0 CAPLUS H-Imidacolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L21 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

FORMAT

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

L21 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN RN 607355-19-1 CAPLUS CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyr (Continued)

HI-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl)-, chloride (9CI) (CA INDEX NAME)

• c1-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-20-4 CAPLUS
CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA
INDEX NAME)

€ c1 =

607355-21-5 CAPLUS 1,3'-8Hpytrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9C1) (CA INDEX NAME)

L21 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2006 ACS ON STN ACCESSION NUMBER: 1997:496275 CAPLUS DOCUMENT NUMBER: 127:197826 Imide-captilitie:

127:197826
Imido-containing polyamic acid, its manufacture, and liquid-crystal orienting agent using it for display Kawamura, Shigeo; Yamamoto, Keiichi; Nishikawa, Michinori; Matsuki, Yasuo
Japan Synthetic Rubber Co., Ltd., Japan; JSR Ltd.
Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JKXXAF
Patent INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: Patent Japanese

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. APPLICATION NO. KIND DATE DATE JP 09185064 JP 3612832 PRIORITY APPLN. INFO.: 19970715 20050119 JP 1995-343560 19951228 A2 B2 JP 1995-343560 19951228

GI

AB A polyamic acid I (R1, R3 = tetravalent organic group; R2, R4 = divalent organic

group) is claimed. The polyamic acid is manufactured by treating a tetracarboxylic dianhydride II and an imido-containing diamine compound

The orienting agent contains ≥1 polymer selected from the polyamic acid and its derivative obtained by partial imidization. Oriented films containing the agent show good adhesion with substrates, high rubbing resistance, and stable pretilt angle.

194216-37-0P 194216-42-7P 194216-6-1P

RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (liquid-crystal orienting agent using imido-containing polyamic acid

display)
194216-37-0 CAPLUS
Cholestane-3,6-diol, bis(4-aminobenzoate), (3B,5a)-, polymer
with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]3a,4,5,9b-tetrahydro-8-methyl-1H-benz{e}isoindole-1,3(2H)-dione,

L21 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
4,4'-methylenebis[benzenamine] and 3a,4,5,9b-tetrahydro-5-methyl-5(tetrahydro-2,5-dioxo-3-furanyl)naphtho[1,2-c]furan-1,3-dione (9CI) (CA
INDEX NAME)

CM 1

CRN 194216-36-9 CMF C41 H58 N2 O4

Absolute stereochemistry.

CM 3

CRN 67879-21-4 CMF C17 H14 O6

L21 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CM 2

CRN 194216-35-8 CMF C29 H26 N4 O4

CM 3

CRN 13080-86-9 CMF C27 H26 N2 O2

CN 4

CRN 89-32-7 CMF C10 H2 O6

RN 194216-46-1 CAPLUS
CN Cholestane-3,6-diol, bis(4-aminobenzoate), (38,50)-, polymer
with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]3a, 4,5,9b-tetrahydro-8-methyl-1H-benz[e]isoindole-1,3(2H)-dione,
4,4'-methylenebis[benzenamine] and
tetrahydro-3a,6a-dimethylcyclobuta[1,2c:3,4-c']difurantetrone (9CI) (CA INDEX NAME)

CH 1

L21 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CM

CRN 101-77-9 CMF C13 H14 N2

194216-42-7 CAPLUS
Cholestane-3,6-diol, bis(4-aminobenzoate), (3B,5a)-, polymer
with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl)3a,4,5,9b-tetrahydro-8-methyl-1H-benz[e]isoindole-1,3(2H)-dione,
1H,3H-benzo{1,2-c:4,5-c'}difuran-1,3,5,7-tetrone and 4,4'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 194216-36-9 CMF C41 H58 N2 O4

Absolute stereochemistry.

L21 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CRN 194216-36-9 CMF C41 H58 N2 O4

Absolute stereochemistry.

CRN 194216-35-8 CMF C29 H26 N4 O4

CRN 137820-87-2 CMF C10 H8 O6

L21 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN CM 4 (Continued)

CRN 101-77-9 CMF C13 H14 N2

IT

194216-35-8P
RL: PNU (Preparation, unclassified); PREP (Preparation)
(liquid-crystal orienting agent using imido-containing polyamic acid

1

for display)

RN 194216-35-8 CAPLUS

CN 1H-Benz(e]isoindole-1,3(2H)-dione,
2-(4-aminophenyl)-5-(1-(4-aminophenyl)2,5-dioxo-3-pyrrolidinyl)-3a,4,5,9b-tetrahydro-8-methyl- (9CI) (CA INDEX NAME)